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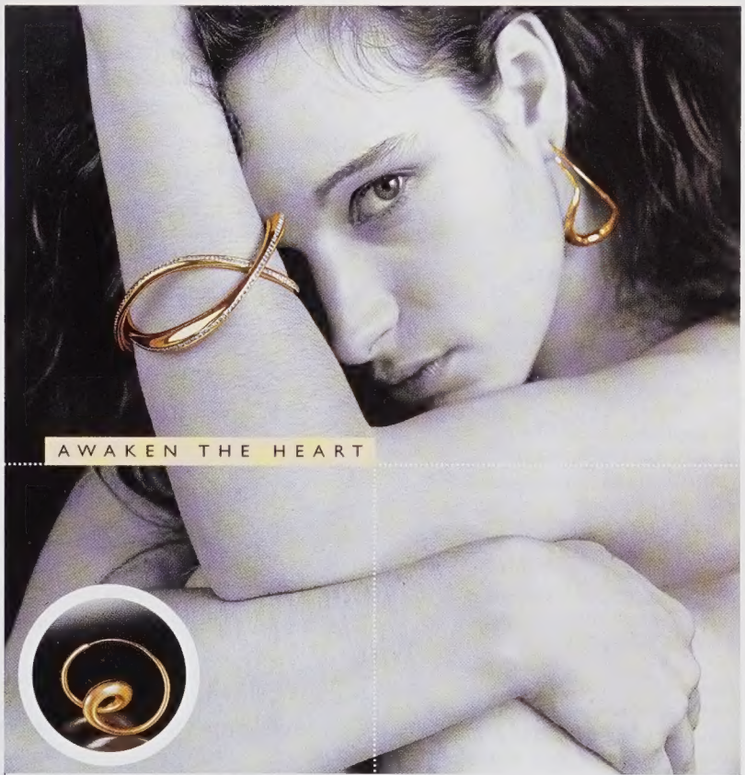

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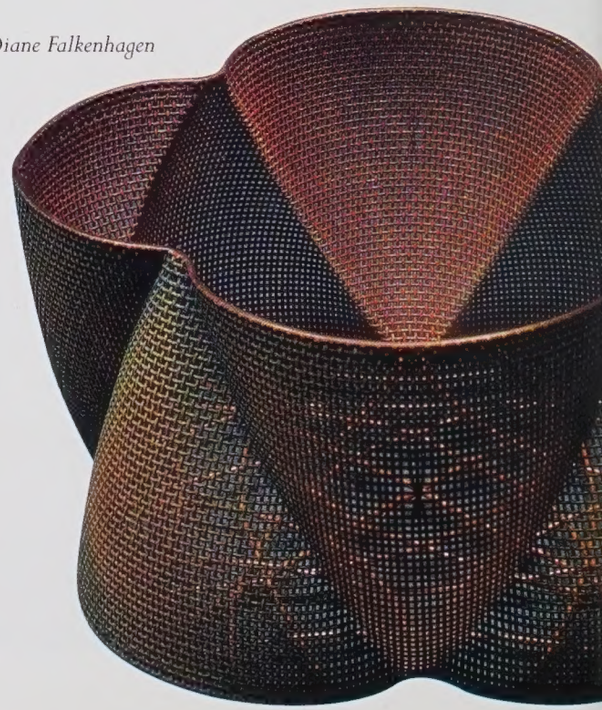

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Dr. Howard Risatti, Chair, Department of Crafts and Professor, Virginia Commonwealth University, "Craft vs. Design: Recognition vs. Understanding"

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FROM THE EDITOR

SUZANNE RAMLJAK

Marshall McLuhan's oft quoted dictum, "the medium is the message" is cited yet again in this issue of *Metalsmith*. Although the maxim contains some wisdom, it conveys only a partial truth. While materials are inherently expressive, they are still subject to another more powerful medium—the artist's intention or desire. Just as guns don't kill, people do, metal also requires another agent to trigger its potential.

In the case of Alan Burton Thompson's work, on our cover, the maker's message often runs contrary to the properties of the medium itself. According to authors Patricia Harris and David Lyon, Burton Thompson's jewelry aims to "demonstrate that artistry trumps material." His insistence on the equality of various media helps to undermine what he calls "the hierarchy of materials," along with their ingrained values.

The jewelry of the late Miyé Matsukata perhaps comes closest to embodying McLuhan's tenet. Jeannine Falino notes that Matsukata's work incorporated artifacts from foreign and ancient cultures, as "powerful emissaries" of distant customs and locales. Rather than imposing her will on such items, she allowed found objects to "lead her down unexplored paths toward an intuitive kind of creation that often surprised the artist herself."

Medium and message closely converge in works discussed in "Influence of the Digital." Information itself becomes the material or medium within a digital process, and working in virtual reality permits artists to explore concepts unhindered by concerns for materials, function, or manufacturability.

While Dennis Nahabetian's process is grounded in the grid structure of wire mesh, the resulting pieces transcend the confines of his chosen medium and often expand into organic sensuality. As Tacey Rosolowski relays, when Nahabetian "massages the mesh" the cold pristine grid "unveils its possibilities and comes to life." In keeping with Nahabetian's work, one could twist McLuhan's claim and propose: the message is the medium massaged by an artist.

SR

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Graphic Design Ted Studios, Inc.
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1300 Iroquois Avenue, #160
Naperville, Illinois 60563
(630) 778-METL (6385), FAX (630) 416-3333
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Executive Director
Dana Singer
(541) 607-9147
DSinger@SNAGmetalsmith.org

Advertising
Jean Savarese
(413) 585-8478 FAX (413) 585-8430
advertising@snagmetalsmith.org

Editorial
Suzanne Ramljak
22 Rockwell Road
Bethel, Connecticut 06801
(203) 792-5599 FAX (203) 792-5588
metalsmitheditor@mindspring.com

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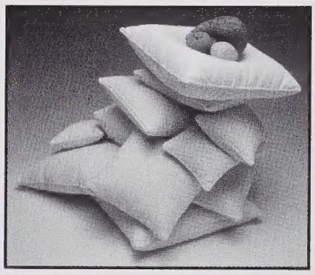

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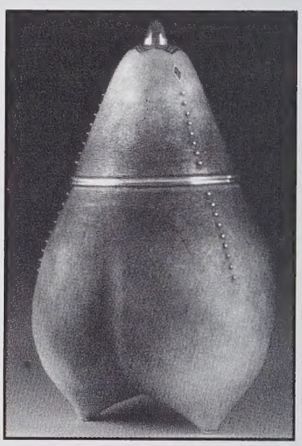

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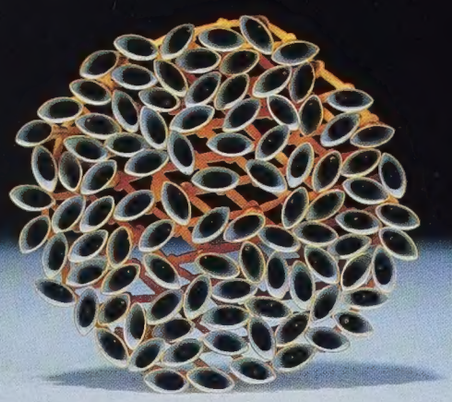

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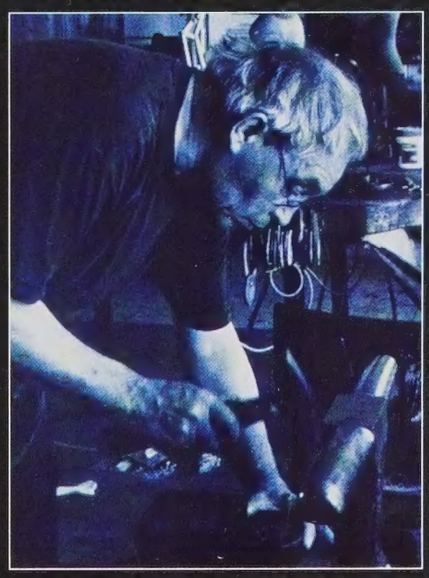

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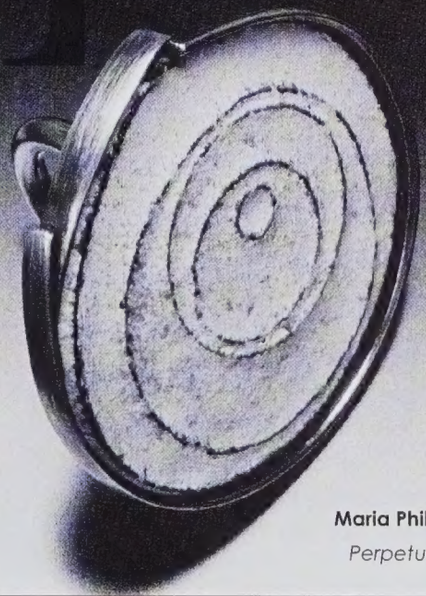

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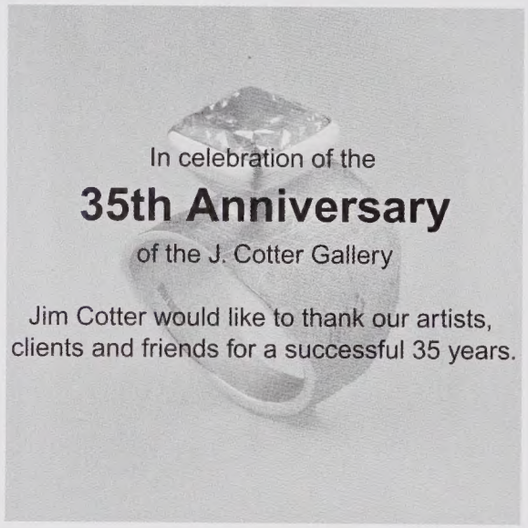

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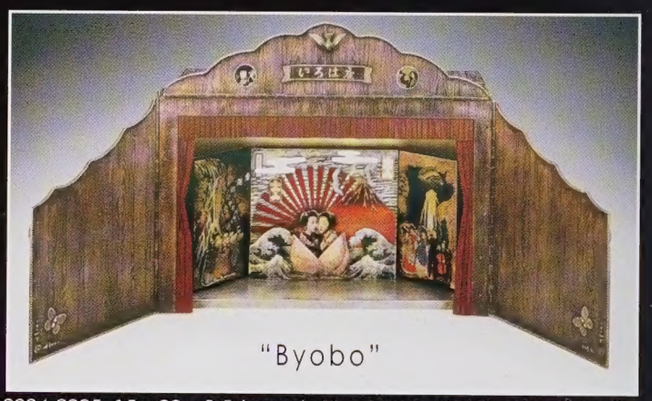

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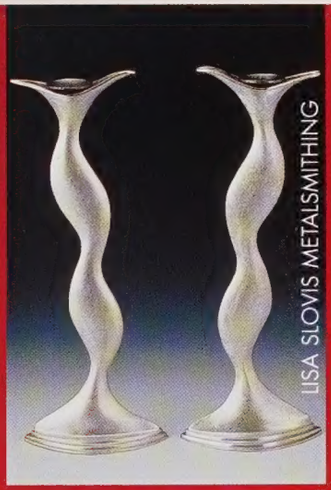

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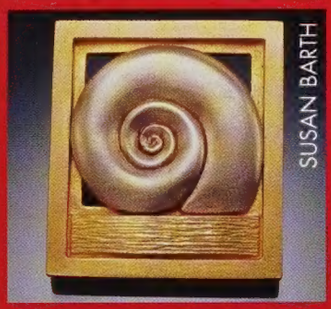

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The Modernist Jewelry of Claire Falkenstein

Maren Henderson

Long Beach Museum of Art, 2004

by Marjorie Simon

Claire Falkenstein was one of those creative polymaths who lived a long and productive life exploring form and space in multiple media. Known primarily as a sculptor both here and abroad, she also made stained glass, paintings, ceramics, prints, and jewelry. At the time of her death in 1997 she was considered a local treasure in California, where she created the monumental three-dimensional stained glass windows for St. Basil's church in Los Angeles. She is probably best known, though not perhaps by name, for creating the glass and iron gates for Peggy Guggenheim's palace in Venice. But as early as 1948 Falkenstein had a one-person show of wood and ceramic sculpture at the San Francisco Museum of Art, and as recently as 2002 she was included, with Lee Bontecou and Louise Bourgeois, among others, in the exhibition "True Grit: Seven Female Visionaries Before Feminism," at the University of Richmond Museum.

Born in Oregon in 1908, Falkenstein made her first jewelry in 1947—a hat pin to wear while accepting an award for designing wall covering. She continued working in California through the post-war years, attaining moderate success. As a jeweler she never achieved the reputation of her colleague and sometime competitor Margaret De Patta, and in 1950 she moved to Paris, where she continued to experiment with "welding, casting plastic resins, and eventually glass." Living in Paris in the 1950s, she continued to make jewelry and cast elements, unconstrained by any commonplace expectation of jewelry or even by wearability. Her disregard for the fashion or adornment aspect of jewelry is evident in her consideration for the flow of the entire piece, especially necklaces that have no clasp, or that open in the front or side. While living in Europe she was introduced to the outstanding glass industry in Murano and she began to experiment with glass, using glass beads as well as the larger discarded ends of blown glass, which she incorporated into the remarkable Guggenheim gates.

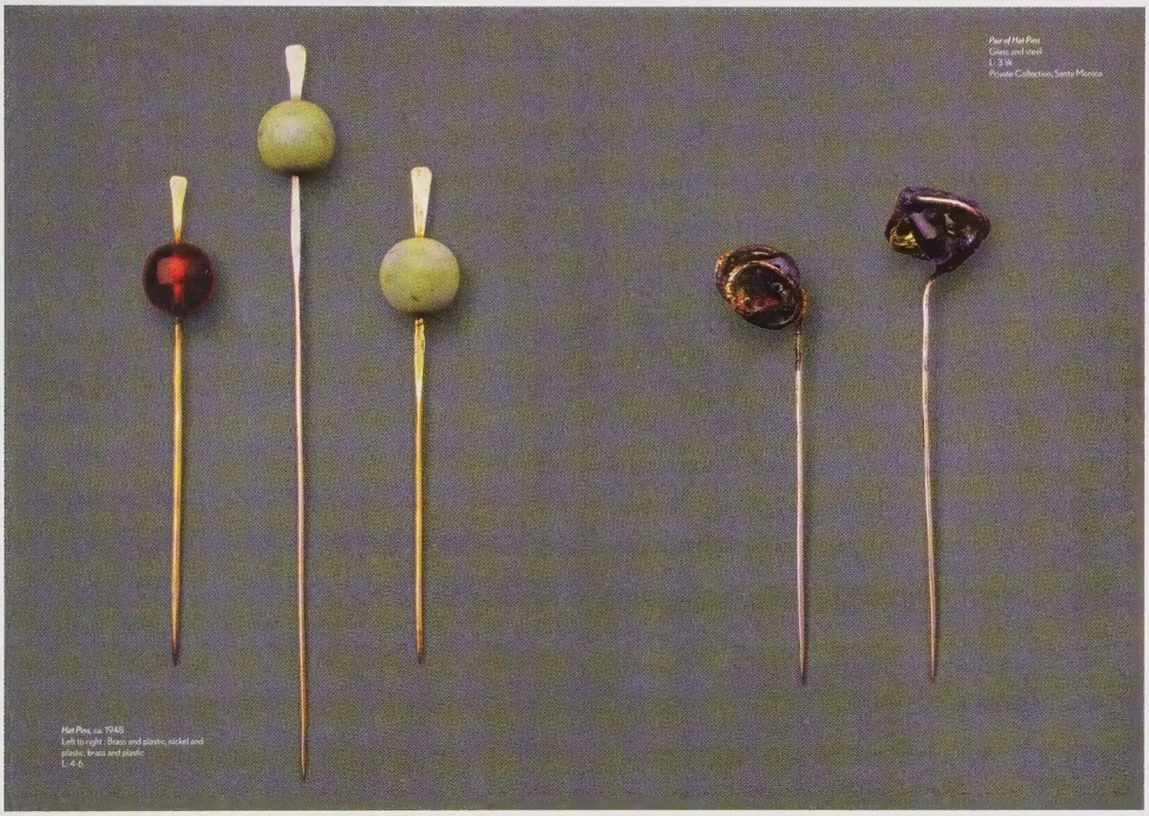
Initially, the intimate scale of jewelry offered an opportunity for Falkenstein the sculptor to work out design issues for larger works, but eventually the jewelry became an end in of itself. Falkenstein felt that jewelry offered a greater potential for creative risk-taking,

precisely because of its economy of scale and materials. She once said that making jewelry was a "means of teaching myself how to work metal. I could do little things and have lots of failures.... It was all aesthetic development for me, because I began to explore ideas and shape and form and so on through metal...."

Essayist Maren Henderson does a good job of foregrounding Falkenstein's jewelry and contextualizing it within her entire oeuvre. (By comparison, Paul Karlsrom's 1995 interview for the Smithsonian Oral History project does not even mention the jewelry). Henderson catalogues the kinds of jewelry Falkenstein made (necklaces, rings, etc.) and the materials she used, but declines to discuss Falkenstein's ideas, neglecting, for example, the lattice structure that characterized Falkenstein's sculpture and may have arisen from her jewelry, since she was known to work back and forth between jewelry and sculpture. Henderson also doesn't dwell on Falkenstein's courageous move in 1950 to Paris, where she knew no one and did not even speak French, except to quote the artist that the early years in Paris were among her most fruitful for jewelry.

Falkenstein is one of many artists (not only women) who have become relegated to the footnotes of art history. Lacking the refinement of her better known contemporaries such as Harry Bertoia, Elsa Freund, and Art Smith, Falkenstein rates only a passing reference in Toni Greenbaum's excellent *Messengers of Modernism*, although one of her wire brooches is included in the 1960 booklet "How to Make Modern Jewelry," published by the Museum of Modern Art. Falkenstein's jewelry inevitably recalls that of Alexander Calder; some of the neckpieces feature the same kind of torques, wrappings, and forgings, as well as a similar use of balance, negative space, and structure. Had Henderson discussed Falkenstein in the context of the arc of the twentieth century, the reader could make the connections between the idea of the line, what Calder called "animating the space," and Falkenstein's own animated line in brooches and necklaces.

The catalogue's clean design and straightforward photographs reveal a lively spirit and a life-long questioning, a fearless pursuit of art, and a long and creative life. However, the absence of pagination and numbering make it hard to situate the pictured work within the larger exhibition. Compared with De Patta's work, Falkenstein's lacks fine craftsmanship. But compared with her other contemporaries, such as Jackson Pollock (to whom she was once compared as the "sculptural Pollock"), she seems a continually evolving, productive artist. Claire Falkenstein is by no means a lost artist, or even a found one, but a contributor to an ongoing creative tradition. ⧗

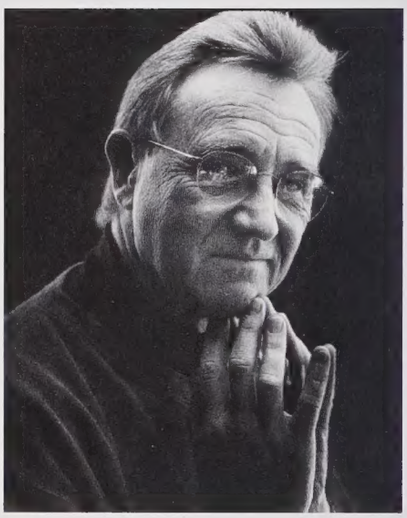

Pair of Hat Pins
Glass and steel
L: 3 1/4
Private Collection, Santa Monica
Hat Pins, ca. 1948
Left to right: Brass and plastic, nickel and plastic, brass and plastic
L: 4-6

Marjorie Simon is a metalsmith and writer based in New Jersey.

INTERVIEW

Frank R. Wilson

by Dana Standish



Frank R. Wilson, 1999
Photo: David Powers

Frank R. Wilson, M.D., is former medical director of the Peter F. Ostwald Health Program for Performing Arts at the University of California School of Medicine, San Francisco, and an associate clinical professor in the university's graduate program in physical therapy. He is the author of *Tone Deaf and All Thumbs?* (Viking-Penguin,1986) and *The Hand* (Random House,1998).

Dr. Wilson's research has focused on the neurologic and anthropologic foundations of manual skill, an interest that grew out of his clinical work seeing musicians with musculo-sketetal problems His book, *The Hand*, explores the relationship between the hand and the development of the human brain, culture, and language. It is Dr. Wilson's claim that the unique structure of the hand contributed to the development of the brain of Homo sapiens, which allowed them to evolve into the dominant animal on earth. Dr. Wilson and his wife, Pat, recently retired to Portland, Oregon. *Metalsmith* caught up with him after a lecture at the Northwest Jewelry and Metals Symposium in Seattle.

Dana Standish: When you decided to study neurology, did you have an interest in the hand, or did that interest develop later?

Frank R. Wilson: I didn't know whether to go into neurology or psychiatry. Then I decided that I was really interested in language, about how ideas take shape. Whether in sign language or writing skills, the hand is tied up with communication. But my interest in the hand as a functioning object started in the late 1970s. Our daughter was around 12 years old and she was taking piano lessons. At one point when I was watching her play, I realized she was doing things with her hands that were simply incomprehensible to me and I thought that as a neurologist I really ought to know how that happens. That realization framed itself in this question: how does she make her fingers go so fast?

DS: And that led you to work with musicians and artists?

FW: That interest evolved over a period of a couple of years, when I started seeing musicians as patients. And it took me about 10 years before I realized that there was something happening in front of me that I had profoundly misunderstood. I was seeing people who said, 'Look, Doc, I've got a hand that hurts and I have a concert on Friday night, nobody else can fix it, can you help me?' I took that at face value, that it was my job to fix the hand and get the person back on stage.

DS: What was really happening?

FW: After lots of frustration I came to understand that in many cases it appeared that the body had initiated some resistance to the career. I began to discover that many of the people I was seeing were fundamentally unhappy. I saw that many of the musicians who were very good had started when they were quite young and they had been unconsciously propelled by the people around them who

didn't understand that just because you can make your fingers go fast doesn't mean that that's what you want to do for the rest of your life.

DS: If metalsmiths want to keep working on a small scale for the duration of their careers, are there any ergonomic concerns they should be paying attention to so you don't see them later on with hand injuries?

FW: You shouldn't use tools that make your hand feel uncomfortable. This is generally true of anything, whether it's typing on the keyboard or shoeing horses or cutting somebody's hair. You can't continue to learn, to improve, you can't soldier on if what you're doing as part of your routine causes your body to hurt.

There are other considerations as well: in addition to the point of contact between the hand and the tool, there's also the fact that there's a lot going on in the arm and the shoulder and the neck, so sitting posture, general health, muscle balance, levels of hydration, and a big thing—anxiety—those are all things that have to be looked at.

DS: Can you describe the earliest tool-using hominids?

FW: A lot of our knowledge is based on the evidence from the skeletal structure of the fossil, Lucy, who lived about 3.25 million years ago. Lucy was an australopithecine. She was probably the only existing hominid in Africa for as many as a million years.

DS: What could Lucy do that the others couldn't do before her?

FW: Mary Marzke is the anthropologist who has done most of the work on Lucy's hand. What she found was that there were several major changes. First of all, the thumb was longer in relation to the rest of the hand than it had been earlier in any nonhominid member of the ape family. Marzke was able to determine that the index and middle fingers were capable of rotating slightly around the long axis so that you could make a tripod, or what she called the "three-jawed chuck."

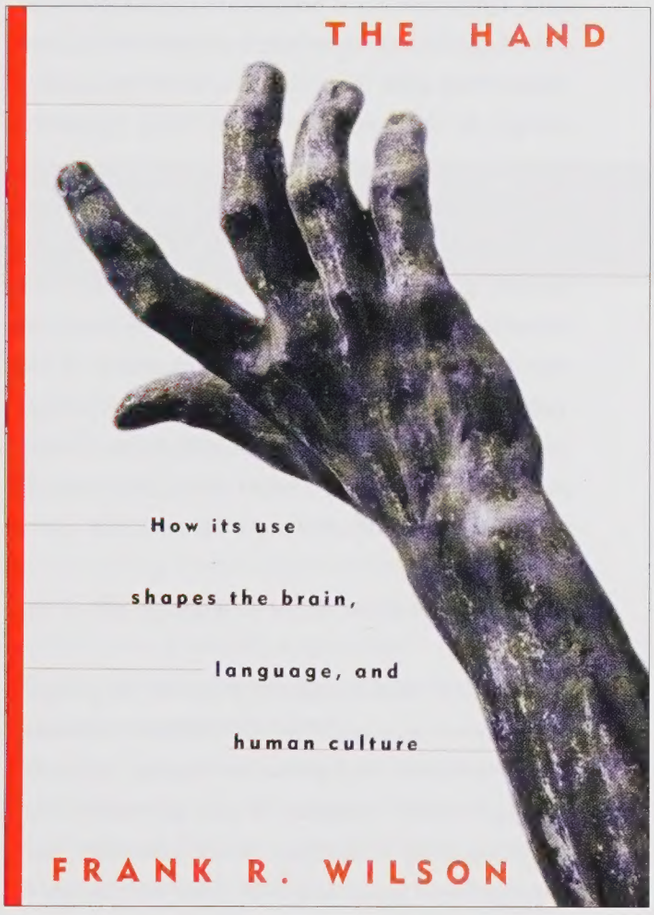
DS: Could Lucy have held a hammer?

FW: Lucy could have held a hammer, but she would have held it in a different way. Lucy did not have the movement in the hand that would allow her to have what we call a power squeeze grip. That's the tennis racket, hammer, and golf club grip of the hand.

Some time after that, probably within about a million years, the first *homo* species, called *homo habilis* or the "handy man," was holding the stone in one hand while knocking at the edge of it with another stone. The first stone tools were made that way. The ability to manipulate the stone in the hand probably was present in the hand by about two million years ago.

DS: Was this a gradual occurrence, when hominids discovered they could use tools, or was it some sort of a defining moment?

FW: There are lots of little moments that lead you toward a branching point where beyond that branching point everything is different. The branching moment came when everything was in place in the hand, tools were being made, stones were being thrown, probably sticks and other shaft-like objects were being used for the purpose of clubbing. So there was now a practice that was widely disseminated through this whole species that boiled down to: we defend ourselves with our hands. Implicit in that statement is that the movements of the hand and the strategies with which you employ the hand really are dependent on a nervous system that collaborates with the hand, that's wedded to it and that grows up with it. That's a critical issue that people need to understand—that it's a system, and the system grows up over time and continues with experience.



DS: Is the thumb an example of form follows function, or is it the opposite?

FW: I'm not sure it's fair to take a question from the Bauhaus movement and turn it into a question about how evolution works. It's a chicken and egg question, and I think that with enough time and with tiny incremental changes, form and function interact, and it turns out that combination A is more successful than combination C. It's like when you work in art. You assemble something, and you try this version of it, and it really doesn't work. That's how the Eames studio worked. If a design was

lousy, they tried something else, and they literally set up experiments to think of how many different ways they could do something. That's how evolution works, that's what evolution really is. You try this idea in the real world, and either it works or it doesn't.

DS: But did our thumb develop so that we could hold tools or could we hold tools because our thumb developed?

FW: There's always been a big argument about this in evolution and the person whose name is associated with this is Stephen Jay Gould, who wrote about what is called "punctuated equilibrium." That is, in fact, things can happen quite abruptly. Most Darwinians say that everything happens by little tiny bits and pieces and over a long enough period of time you can come gradually to a fork in the road. Gould would say that it is perfectly possible that just bang out of nowhere, out of the blue, some design came along because of a genetic aberration that changed everything literally overnight. There's some evidence that some of the really important evolutionary changes in structure and function really happened like that.

So the answer to your question about the thumb could be, we were able to make tools because the thumb suddenly got longer and we were able to actually hold something, but we also know it involved the change in wrist bone structure, it was the development of the muscle that makes it possible to rotate the pinky finger toward the thumb. Without that muscle, it doesn't mean anything. There's actually a whole collection of changes that make it possible to hold a hammer, not just a single change.

DS: How does the development of language skills fit into all this?

FW: We don't have any gene that says we are going to have a spoken language. If we raised children in isolated environments with no exposure to language, all human language would disappear in one generation. The interesting thing is that you cannot genetically pass language from a parent to a child. What you can pass is the capacity to hear, the capacity to articulate, the capacity to join the perceptual and motor system together in a way that's so compelling that kids learn language beginning at the age of about one at an unbelievable pace. And it's laid down so profoundly that you can always tell where somebody was born, because they carry the accent, the dialect, of the people who taught them in the first place.

DS: Is this true of sign language as well?

FW: It turns out the same is true of sign language. Sign language has dialects, it has accents, and when people have brain damage, like a stroke, they demonstrate exactly the same deficits in speech output that speaking people do. So the language capacity of human beings has nothing to do with the input or output. It can come in the visual channel, it can come in the auditory channel. It turns out that with people who don't see or hear, such as Helen Keller, it can come in through the hands.

DS: What is the relationship between visual ability and the use of the hand?

FW: It is thought now that in our normal ongoing adult visual behavior we are using multiple visual systems at the same time and each one of them attracts our attention under very different kinds of circumstances. The people who put stuff on television and video games have already figured this out. They take the most primitive circuitry that exists in the human visual system and they drive information into that system by producing stimuli that come in via the periphery. It's very close to what happens to any animal that is living in the branches and swinging between trees where you have to be able to know exactly how to maneuver through a very complex environment in which things are coming at you from the side and from above.

DS: How does this affect children's ability to learn?

FW: No one really knows what effect it has on children to be exposed to images that are coming in ways that they have no control over. If you were to pick up a ball, for example, and turn it in your hand to look at it, you're actually controlling the way information is acquired and presented to you. That's not the case in video games. So the result is that we've now got younger and younger children whose brains are being bombarded with a visual world that for all practical purposes is like the visual world that existed for our ancestors 10 or 15 million years ago. It's a world full of emergencies.

DS: In your book you talk about the importance of manipulating tools and objects, and of learning how to put things together. What repercussions does it have for the development of intelligence if one does not have these manual experiences?

FW: One of the questions that I've been asking the psychologists and people working with this is, "What is the effect when children are not encouraged to sit quietly with objects and move them around, or to look at a book and go back and forth between the picture and look for the word that goes with that picture?" It may turn out to be totally irrelevant, but it's worth asking the question: if children lack language training and exposure and the chance to experiment—reading stories, telling stories, etc.—if a child's mouth were taped shut and you just played cacophonous sounds in music and heavy metal

into a child's ears, what would happen to their brain? How would they develop? We don't know.

If you take a musician and send her off to some island where she only plays music and then bring her back at the age of 30, how good is she going to be at making her way around New York City? Young musicians are often trained in highly sheltered environments rather than fully educated, and end up having to have someone hold their hand and walk them around, take them to the concert hall and do things for them because they just can't manage all that on their own. You can't do that experiment with children. You'd never get the approval of an ethics committee. But this is being done on a massive scale every day around the world by people who are recruiting psychologists and software engineers to develop programs and visual entertainment that so captivate children that they have no ability to pull themselves away from them.

DS: Many people spend a lot of time looking at the computer screen instead of working with their hands. I gather from your book that the part of our brain that forms ideas and anticipates cause and effect relationships and that imagines an object in its finished state (in other words, imagination) is not being developed when we stare at a screen.

FW: I have some reservations about saying the "part of the brain that." There are some things about specialization of function that we know about from Stephen Pinker, a very distinguished neuroscientist at M.I.T. He's written an important book called *The Language Instinct*. In the book he tells about people who have developed language loss, where they can't say anything except the names of vegetables, and so he asked the question: is there a part of the brain that's specialized for vegetables, is there a greengrocer section of the brain? The answer is no. We don't really understand exactly why that happens. But we do know that there are certain very complex functions of the brain like language that are critically dependent upon the normal functioning of very restricted areas of the brain. So in that sense we can say that there are specializations. But, to use the example of a racecar, if you cut the gas line, the damned thing will shut down. It also will shut down if you disconnect the carburetor. So there are many systems within this very complex system upon which its normal function is dependent immediately.

DS: One of the most simple and fascinating things in your book is the phrase that "brain is hand and hand is brain." Could you explain that for people who haven't read the book?

FW: There's a Robertson Davies quote from *What's Bred in the Bone*, "The hand speaks to the brain as surely as the brain speaks to the hand." And because these communications are literally instantaneous and because they change over time, it really becomes a system as though it had been programmed genetically to function that way. That's what Henry Plotkin writes about, in his book called *Darwin, Machines and the Nature of Knowledge*. He talks about what he calls "heuristics." These are learning devices. The primary heuristic is not only the physical structure you're born with, but the time sequence plan. It says there are things that are going to happen at a certain time. At age one, the child is programmed to reach out and extend its legs and stand up. Once they do that, they've learned something. That's what Plotkin calls the "primary heuristic." Which means that's it's genetically there and it's going to drive the system in predictable ways to do certain things. There's also a primary heuristic that says that your tongue and auditory system and your eyes are going to follow people and you're going to pick up speech. But it doesn't tell you whether you're going to pick up French or Spanish or Chinese, which would be the secondary heuristic. Once the secondary heuristic is in place, it behaves as if it were genetically programmed. It's that stable. You don't forget how to ride a bicycle. Once you've done it, it might as well have been genetically programmed.

It has taken me a long time to learn not to try to tell everybody everything I think I know.

DS: It is interesting the way you've been able to pull all these ideas together in your book.

FW: It has taken me a long time to learn not to try to tell everybody everything I think I know. I don't really know very much at all. But I have a lot of interesting questions and a lot of interesting ideas. What I try to do is to ask, out of all this stuff, what's the thing that interests me the most? And then I just home in on that.

DS: Could you sum up how working with your hands leads to the development of intelligence?

FW: Let's just say that working with your hands leads you to ask many questions. It's like [industrial designer] Ralph Caplan said in his book *By Design*: "design is a problem solving process that begins with being a human being." ✠

Dana Standish is a writer living in Seattle, Washington.

Gary Griffin

by Kate Wagle

Gary Griffin has been Artist-in-Residence and head of the Metalsmithing program at Cranbrook Academy of Art for the last two decades. His affection for Cranbrook is surpassed only by his encyclopedic knowledge of the place. He occupies a brand-new, state-of-the-art studio, "a clean, well-lighted space" within a recently completed building, thoughtfully designed by Spanish architect Rafael Moneo. The space, however, is only a functional home base for Griffin, whose intellectual, aesthetic, perhaps even spiritual studio is the Cranbrook campus.

above right
Exterior of Gary Griffin's studio at Cranbrook Academy, Bloomfield Hills, Michigan, 2004
Photo: Kate Wagle

below
Gary Griffin in his studio, 2004
Photo: Kate Wagle

Griffin knows the entire campus with an intimate specificity and provides context for every element of the environment, including the fact that the stair rails in the recently completed day school building, designed by Peter Rose, are double, one adult height, the other child-scale, and that the oculus in the ceiling of the austere and handsome new natatorium (by Tod Williams Billie Tsien) drops a white column of falling snow into the swimming pool in winter. He delights in every detail, telling the stories with a sense of wonder, responsibility and happy fervor.

George Booth, the newspaper publisher who founded Cranbrook, envisioned the Academy of Art as a kind of utopian community that would support art and education at the highest level. Trained as a young man as a blacksmith, Booth had an abiding respect for the talent, labor, and "handwork" of the craftspeople he employed, and metalsmithing has held an honored position at Cranbrook since the beginning. Booth foresaw an organic, ever evolving constituency and site. As a result, every element of construction, furnishing, and landscape is a carefully considered expression of prevailing values in art and design over the last 100 years. Gary Griffin understands the rarefied privilege of his location very well, referring to the campus fondly and ironically as "the bubble."

It's no surprise that Griffin, who values ideas, art, and labor equally, was attracted to Cranbrook. His work, when he first arrived in the 1980s, consisted of ironwork sculpture and functional pieces employing a specific representational vocabulary that included cowboy boots and branches, guns and holsters, roses and silos. Transplanted from the west coast to the midwest, Griffin was poetically exploring his own western iconography with origins, at least in part, in the nineteenth-century popular press that glorified the western hero, "an objectified mass dream" that continued to exist as a romantic paradigm throughout the twentieth century. Cranbrook is a site on which Griffin can manifest dreams into reality through labor and intellectual inquiry, a place to plant feet, grasp tools and materials, and contribute to the bricks and mortar authenticity of another hundred year-old dream, of nineteenth-century utopia. Booth's "Cranbrook community," both physical and philosophical, is central to Griffin and the development of his work.

Griffin's new studio space is a short walk across the grounds from his resident artist living quarters. Located in the spacious corner of an L-shaped metals facility, the ground floor of Moneo's Metals/Ceramics/Fibers building, the studio is designed with the same attention to function and philosophy that characterizes every Cranbrook structure. The space consists of a large (22 x 28'), bright, high-ceilinged central workroom with two connected rooms dedicated to small-scale processes and computer production, respectively. The room has a distinctively new feel—it is crisp and uncluttered. Its

corner location is purposefully at the "heart" of the floor plan, located between the wing that houses the 15 graduate students comprising Griffin's current class, though there is no formal class schedule and Griffin determines the shape and quality of his frequent interactions with students. On the other side of his studio are the all-business, state-of-the-art metalsmithing and blacksmithing shops that are the functional arm of the program and Griffin's own practice. A student assistant works with him there one day a week during the academic year and three to four work with him full-time "on commission and speculative projects" in the summer months. Models, flat-files full of drawings, and parts and pieces from a range of periods are arranged for maximum accessibility. A large corner window makes a sort of showcase to the exterior of the building. The window's contents are a neon "Metalsmith" sign, real cowboy boots, and a number of other icons, both fabricated and collected, of Griffin's 30-year practice—they provide an eccentric counterpoint to the austere lines of the intersecting gray walls. Griffin is currently constructing a second major studio near Santa Fe and will split time between the two spaces when it is complete.

In contrast to his earlier work, composed with a representational language and built for some unknown, perhaps mythological landscape, the current work seems to be generated by an endless array of questions that flow directly from Griffin's practiced understanding of his medium and his many responses to the campus environment. The autobiographical image vocabulary and referential elements suggested experience and narrative. Now he is more interested in *providing* a "remarkable experience," describing a gate, for example, as a potential "magical" passage.

Griffin is looking for a different way to understand form, structure, and materials. He questions how he can "radicalize the form" of the things he wants to work with. He asks how an ironworker can understand negative space, since most ironwork is concerned with line and positive form and "spends most of its time in positive space, except for some German and modernist work." He wants to know how to move from first-person (his narrative work) to second- to third-person perspective "using the agencies of design...the use of transparency, value shifts, pointillism, lines and planes." He reflects that, "At its best the first person is extraordinary, but only extraordinary if it penetrates the experience of another human being."

His current practice is broad and deep and best described by his statement: "I want to wrap my arms around *all* of it!" He builds gates, weather vanes, shelves, candleholders, fire-screens, uses the forge, casting, CAD/CAM software, laser cutters, and powder coating. Griffin is also making stamps, pulling molds, building printing tools, all in the context of understanding their decorative uses and origins. He is starting to explore works on paper, "looking at a lot of drawings, limited palettes, graphite and charcoal only," to "get a feel for what this process might be." He finds the pursuit of untried media "invigorating" even as it is "scary and intimidating;" his real intention is always to understand something new.

On a visit to the archives, we look at documentation of the work of Cranbrook craftspeople, students and residents that include Charles Eames, Samuel Yellin, and Harry Bertoia among many others. The work of each speaks of a particular time, place, and set of values. All reveal innovative ways of thinking about their subject. Griffin is intensely aware of his responsibility to "up the ante" and leave a relevant legacy to their collective studio. ⧗

Kate Wagle is a metalsmith and Head of the Department of Art at the University of Oregon in Eugene.

Cranbrook Academy of Art, main facade of New Studios by architect Rafael Moneo, 2002
Copyright Cranbrook Archives

Gary Griffin
End Table, 2003
18 3/4 x 15 x 21"
steel, glass
Photo: R. H. Hensleigh

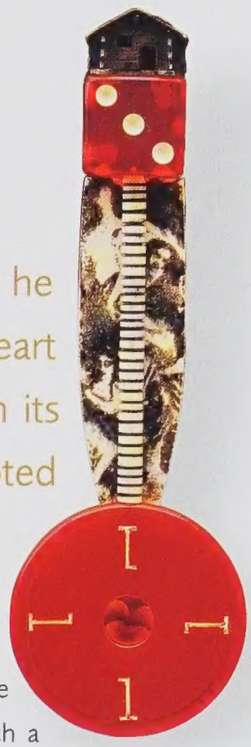
Neapolitan Boy (brooch), 2004
sterling silver, brass, plastic,
tigereye, found objects
2 1/2 x 2 1/2 x 1"
Photo: Dean Powell

Redemption and Reverie

Tales from Alan Burton Thompson

by Patricia Harris and David Lyon

Metalsmith Alan Burton Thompson *sees* things because he looks. He finds the emotion inherent in a tiny casting of the heart or a bird, the intimacy a cast-off bauble once enjoyed with its owner. And he assumes the burden of redeeming the corrupted vocabulary of once-powerful symbols to tell a story.



Four (brooch), 2004
bone, ink, plastic, sterling silver, found objects
4 1/2 x 1 1/2 x 5/8"
Photo: Dean Powell

Thompson believes so strongly in looking beyond the stereotypes of objects that he sometimes fantasizes about deliberately "losing" some of his brooches by removing them from the context of fine art. "I've thought of planting some of my pieces in my booth at the antiques store," he muses, referring to his side business as a dealer in collectibles. Such a profligate act wouldn't really be a loss, he protests, because buyers who came across them would treasure them as objects in their own right without the label of "art." The pieces would continue to exist, to have a life of their own, he says. "Someone like me can find one, have an experience with it."

Someone like me. It's hard to imagine anyone who cares quite so deeply about castoffs as Thompson, who accretes mementos and trinkets like a magpie. His office in the Program in Artisanry at the University of Massachusetts/Dartmouth features several shelves of Eiffel Tower, Statue of Liberty, and Empire State Building statuettes—and those are only some of his formal collections. "I collect thousands of objects," he admits, positing that the "act of collecting is a kind of drawing. Only a tiny fraction makes it into my work."

As an undergraduate student, Thompson changed majors several times and considered becoming a sculptor. "But sculpture seemed to me to have rules about what could and couldn't be done," he says, so he found his home instead in jewelry. "Diversity of intent is one of the strengths of our field," says Thompson. "Jewelry can be anything—made of anything. It can mean anything." He's been proving that hypothesis ever since.

By the time he graduated from SUNY Buffalo in 1981, Thompson was finding a ready market for abstract jewelry of decidedly mixed media. He quickly became known for a line of badge-like brooches of Presstype-decorated cardboard slide mounts with a variety of bright and glittery materials sandwiched inside. Thompson diligently bolted the pin-backs to a strip of metal hidden inside the pieces as he would have for artisanal jewelry of precious metal. But his care and craftsmanship made scant impression on an initially enthusiastic potential buyer who dismissed a piece as "ugly" when she realized that the little blue crystals moving inside the frame were not sapphires—but rather flakes of craft plastic marketed to be melted into faux stained glass.

For the mere cost of a lost sale, Thompson got something to think about: how perception shifts based on the intrinsic value of materials in a piece rather than on the object itself. Mixing "fine" and common materials was his natural penchant—he says he never thought about it as an aesthetic issue until graduate school. If anything, his experience with the disillusioned buyer fueled his determination to demonstrate that artistry trumps material.

That watershed moment at a craft show also started Thompson thinking that most people don't look at objects closely enough, that they don't become engaged with them. Shortly after he received his MFA from SUNY New Paltz, he started making jewelry that entices the viewer with the promise of a story.

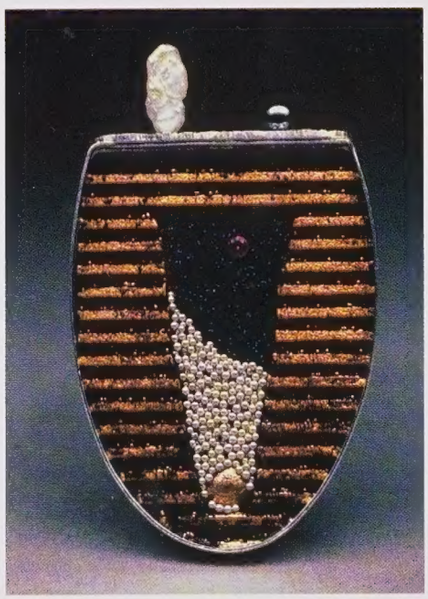
When his mother died, Thompson discovered Victorian mourning jewelry, with its récherché use of human hair (truly mixed media, he realized) and its coded narratives. "Each thing meant something, and if you got the code, you 'got' the piece," he recalls. He recast Victorian forms with a modern sensibility, following something of the Victorian vertical organization, but eschewing the strict code of correspondences. Rather than manipulating found objects to spell out an allegory, Thompson was interested in the objects themselves and whatever meaning they might have acquired from association with previous owners. He found himself giving value to discarded materials and rejected objects.

But he was equally interested in forms and metaphoric images that had lost their vitality from overexposure in popular culture. "I'm interested in symbols that have become dead metaphors, like the heart," he says. For the last two decades, Thompson has been transforming the detritus of sentiment into narrative reveries—stories, really—of memory, loss, luck, anxiety, and longing. If a single theme unites all this work, it is redemption: the restoration of value and meaning to the emotional vocabulary of the visual commons.

"I don't expect my pieces to read like a story from beginning to middle to end," he cautions. "I want my work to be about the object—about the potential for making really potent objects." Thompson's *Boat* brooch of 1987 demonstrates his intent. The "case" for the brooch is a plastic canoe from a child's toy set—one he found in his own childhood closet after seeking it in vain on the antiques market. Reading from top to bottom, the brooch features a small profile cameo, a scattering of broken opals, and a minute gold spoon.

Boat (brooch), 1987
plastic, 22k gold leaf, opals, felt, brass, basswood, cameo, shell
7 1/2 x 1 1/4 x 1"
Photo: A. Paz

Rather than manipulating found objects to spell out an allegory, Thompson was interested in the objects themselves and whatever meaning they might have acquired from association with previous owners.



Kingdom (brooch), 1988
sterling silver, acrylic, styrene, sandpaper, glitter, 22k gold leaf, pearl, hematite, synthetic ruby, glass
1 7/8 x 1 x 1/4"

Cameos held a special fascination for Thompson. On one hand, they depict anonymous, idealized women in profile. On the other, most loose cameos that find their way into the collectibles market were once treasured as fine ornament before they fell out of fashion. But Thompson is devoted to rehabilitating terms of endearment that have lost their luster, and he uses them without a hint of irony. Mounted as part of the tableau of his brooch, the cameo becomes a feminine presence. If we take the broken opals (stones no less pretty for having little intrinsic value) and the spoon (a symbol of nurture as well as measure) with the boy's toy glossed with gold leaf, *Boat* tells a story of a man recalling a loving childhood. "Our emotions connect us to our past," he says.

While Thompson was making brooches with portrait cameos, he was also producing some of his last fully abstract work, such as the badge-like *Kingdom* and more elongated *Valley* (both 1988).

Valley (brooch), 1988
sterling silver, acrylic,
sandpaper, glitter, pearl, 22k
gold leaf, opal, glass
3 x 1 x 1/4"

Luck #1 (brooch), 1990
basswood, sterling silver, 24k gold plate, steel, paint, glitter, found objects
3 x 2 1/2 x 1/2"

Luck #2 (brooch), 1990
basswood, bone, sterling silver, opal, paint, glitter, found objects
2 1/2 x 2 1/4 x 1/2"

Redemption in these pieces involves tearing down what Thompson calls "the hierarchy of materials" rather than paying homage to past emotions. Both pieces employ glitter and pearls, while *Valley* uses a sandpaper backing as a lesson in the surprising beauty of the mundane. Both are set into bezels, a formality that signifies that they are "serious" jewelry. Tiny balls flow in chambers, creating dynamic compositions that charge the brooches with a talismanic energy.

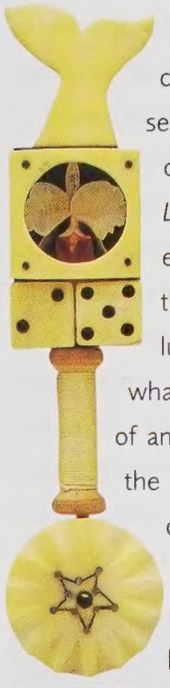
Two impulses dominate Thompson's work after the late 1980s: an emphatic insistence on equality of value among materials, and narrative accomplished through juxtaposition of objects and forms. With a series of brooches devoted to the general theme of "Luck," Thompson began to move toward a direct, eloquent mode of storytelling.

In terms of color, composition, and even some materials, *Luck #1* and *Luck #2* (both 1990) resemble *Kingdom* and *Valley*. The first depicts an airplane crashed into a hillside on what appears to be a starry night. The second depicts a nineteenth-century sailing ship (a bone scrimshaw ship's portrait) sinking at the top, and a twentieth-century ocean liner (a silver casting or charm) sinking at the bottom. Along the top rim, a small figure kneels in prayer. In both pieces, the correspondence to mourning jewelry is unmistakable—they evoke a powerful sense of loss. Yet they do not depict specific transport disasters, but the more general concept of "bad luck." On reflection, both ask *Who is vulnerable?* and *Why?* In that sense, they are more disturbing than if they referenced fixed events such as the sinking of *Titanic*.

Of the two-masted ship on *Luck #2*, Thompson quips, "You can tell I'm in New Bedford." (The Program in Artisanry, which Thompson directs, recently moved to UMass/Dartmouth's downtown New Bedford campus.) In the mid-nineteenth century, the southeastern Massachusetts city was the leading whaling port in the world, and one of Thompson's late pieces in the "Luck" series, *Last Look* (1993), makes an explicit reference to the city's whaling heritage. With its free-spinning fluted wheels at the bottom, the brooch mimics the form of a pie-crimper—a device that whalers used to

carve from whalebone or ivory during lax moments, then give to a sweetheart, wife, or mother upon arriving home after months or even years at sea. In return, she would use it to make him a pie. Pie-crimpers are a lost craft object, specific to New England whaling culture, and rarely found outside a handful of maritime museums.

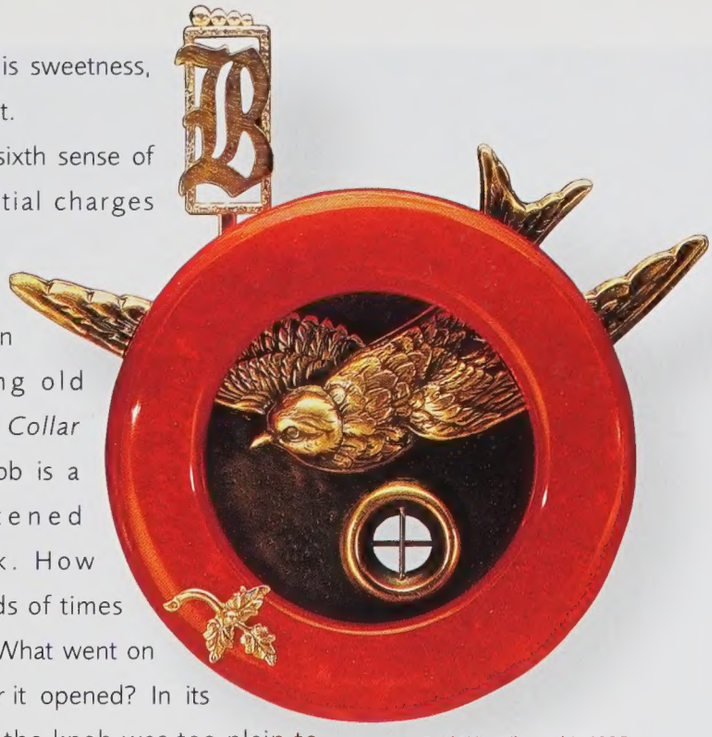
Thompson professes to love pie-crimpers because they are "ceremonial objects, real exchanges of labor." The form conjures up the sailor's lonely time at sea, thinking of home, and his loved one's longing for his safe return. But *Last Look* is far more than an evocation of separation. The dice that Thompson has incorporated—lucky seven!—and the cutout of a whale's flukes speak to the uncertainty of any individual whaling venture, while the name for the piece points to the certainty the industry brought to the whale. Life has winners and losers, and Thompson's series addresses both good and bad luck.



Last Look (brooch), 1993
antique whalebone, wood, thread, acrylic, found objects
5 x 1 1/4 x 1/2"

mystery. There is sweetness, yes, but not light.

That prickly sixth sense of hidden potential charges the series of brooches that Thompson created using old doorknobs. In *Collar* (1997), the knob is a worn, flattened wooden disk. How many thousands of times was it turned? What went on behind the door it opened? In its utilitarian life, the knob was too plain to notice, and when it had served its purpose, it was discarded. Here Thompson has studded the wood with pearls and used it as a frame for another of the debased emotional symbols, the red rose. On top sits yet another little bird; the clear stamp of "Japan" on the figure proclaims that the components of *Collar* are indeed found objects. The commercial branding is something of a challenge to the viewer: See the beauty beyond the object's lowbrow provenance.



Red Wing (brooch), 1995
copper, brass, sterling silver, acrylic, found objects
3 x 3 x 1/2"

The commercial branding is something of a challenge to the viewer:
See the beauty beyond the object's lowbrow provenance.

In the mid 1990s, Thompson began to consciously relinquish his Victorian influences. (He even made a brooch that he calls *Goodbye Victoria* that incorporates the name "Victoria" in metal script—a fairground keepsake from the early twentieth century.) Perhaps most dramatically, he collapses narrative from linear arrangements to centered clusters of imagery. In *Red Wing* (1995), for example, he uses a circle of red plastic to organize the found and fabricated objects. The ornate capital "B" signifies that *Red Wing* is part of Thompson's "Learning" series, which incorporates alphabet letters. (Presumably "B" is for bird.) But *Red Wing* is not just a decorative bird pin. Beneath the bird is the window motif that recurs frequently in Thompson's work—in this case a round window crossed with bars like a porthole on a ship. This window is opaque, and whatever lies behind it is a

In *Fall, Feather, Funnel* (1997) and *Restore* (1998), Thompson hits his stride in elaborating a unified, if mysterious, narrative densely packed onto a convex metal surface. At first glance, *Fall, Feather, Funnel* seems a light vignette of flight and floating, with its minutely rendered parachute and articulated feather. Yet the funnel is troublesome. A ball—not unlike the parachute's payload—is poised to roll down the spout. The surface of the brooch is stamped with numbers and pocked with boxes. Are they coordinates? Counts? Or simply random numbers? The uncertainty transforms idyll into anxiety.

Collar (brooch), 1997
19th-century painted wooden doorknob, brass, plastic, copper, found objects
4 x 2 3/4 x 1"

Fall, Feather, Funnel (brooch), 1997
copper, sterling silver, brass
3 1/2 x 3 1/4 x 1/2"

meant to be touched, to be treasured, to be passed on," Thompson insists. "That pin on the back gives permission to do that." The owner will continue to unravel the complexity of Thompson's tales with each wearing.

Thompson took a four-year hiatus from his bench to re-evaluate both his motivations for making jewelry and the audience for whom he was creating it. The fallow period ended in 2004, and in October he showed a small group of new works at Daemen College in Amherst, New York, less than five miles from where he grew up in Tonawanda.

The newer works both recapitulate some of Thompson's earlier concerns and make forays into new territory. *Four* (2004), for example, features a single plastic die, showing three dots. The plastic disk at the base of the brooch has four numeral 1s inscribed on it. Together they add up to lucky seven. The vertical configuration of *Four* evokes Thompson's work from the 1980s, but the message is hermetic. A little house sits atop—a home built on luck, perhaps.

"They're meant to be touched, to be treasured, to be passed on," Thompson insists. "That pin on the back gives permission to do that." The owner will continue to unravel the complexity of Thompson's tales with each wearing.

A troublesome surface also rocks the world of *Restore*. References to Thompson's past imagery —the prow of a canoe, a cabochon set deep into a bezel, gold and silver balls, a leaf—haunt the surface mesh, as if they are about to be sprung away and lost. Buried deep inside the torn mesh, visible more as potential than actual, sit luscious red roses. Must the surface be removed to restore the frank emotive power of the rose? Are the artifacts all just a ruse, a scrim over a simpler sentiment, a screen to disguise straightforward passion? Is *Restore* an autobiographical self-examination—or a screen on which the viewer can project his or her own emotional state?

Restore (brooch), 1998
sterling silver, copper, brass,
acrylic, 24k gold plate
2 7/8 x 2 7/8 x 3/4"

Despite the size and weight of many of the pieces, Thompson says, "It's important to me that they are brooches" rather than small sculptures or desktop *objets d'art*. The fact that they are jewelry permits an intimacy and ongoing conversation with the owner that other forms of art do not. "They're

Neapolitan Boy (2004) restates the barred porthole window as a central motif. Within lies the face of a beautiful boy, as if the window were a time machine, looking back to Thompson's own lost youth. The figure is surrounded by tigereyes, the most boyish of semiprecious gems. The glowing red surrounding the window serves up the images with the heat of passion.

Transferware (2002), on the other hand, is as cerebral as *Neapolitan Boy* is visceral. The references are explicitly Victorian—the name refers to the blue transferware that reached its apex of popularity during the mid to late nineteenth century. The motifs of dragonfly, fan, and lace are equally Victorian. Slyly, Thompson has slipped in a cake of blue watercolor pigment with a butterfly molded on its surface—his personal small appreciation of gratuitous beauty in a consumer product.

The most ambitious of the new works, however, is *Stealth* (2004). The convex surface is reminiscent of a snow globe, but the scene inside is hardly a wintry landscape. The bird attached to the surface seems to be fleeing. Scale is ambiguous—the bird may be a normal-sized creature in the viewer's foreground or it may be a gargantuan, nightmarish figure that dwarfs the scene inside the partial dome. Of the figures "under glass," so to speak, the church and the farm (complete with windmill) are undermined with ant farm-like tunnels. A shadowed moon shines high in a sky alarmingly dashed with the colors of fire. Three bat-winged figures are barely visible against the tumult. Bats? Stealth bombers? In either case, the images are compelling, disturbing, and complex.

In *Stealth*, Thompson redeems the bird trinket, the images of the family farm, and the visual cliché of the cathedral by treating them not merely as imagery, but as icons. In effect, he has exalted the lowly and given them such dignity that the viewer is forced to reconsider both their form and content. The articulated feathers of the cast swallow *do* have a grace and formal elegance. The outline shapes of the farm and tunnels conjure up the American expressionism of Thomas Hart Benton and Grant Wood. But the nightmare sky and surreal composition are all Alan Burton Thompson—dreaming with objects, making the viewer pose the questions. ⧗

Critics and writers **Patricia Harris** and **David Lyon** live in Cambridge, Massachusetts.

Stealth (brooch), 2004
copper, brass, plastic, enamel, 24k gold leaf, found objects
3 1/2 x 3 x 1"

Pendant Necklace with View of the Charles River, ca. 1975
gold, enamel, silk cord
pendant 2 7/8 x 1 3/8"
Collection of Virginia Grace Cohen
Photo: Steve Dillard

This article has been funded by Helen W. Drutt English in support of research that will expand historical documentation in our field, and in appreciation for the recognition bestowed upon her in receiving the 2000 Honorary Member Award from the Society of North American Goldsmiths.

Things Intuitively Seen

The Jewelry of Miyé Matsukata

by Jeannine Falino

Quietly elegant in her dress and demeanor, and boldly experimental in her outlook, Miyé Matsukata was a remarkable artist who pioneered new approaches to jewelry design and fabrication. Despite the national and international successes that she achieved, Matsukata's reputation quickly faded after her unexpected death from meningitis in 1981. Yet her unconventionally fluid and unstructured approach to jewelry was widely emulated even as her name was forgotten. Except for clients, friends, and colleagues, few recall the unique perspective she brought to contemporary jewelry.

Miyé Matsukata seated in Boylston Street showroom, ca. 1975-76
Matsukata Papers, Archives of American Art, Smithsonian Institution

Wedding photograph, Miyo Arai and Shokuma Matsukata, May 1913
Photo courtesy Matsukata and Reischauer families

Matsukata's contributions are best assessed in light of her upbringing in an unconventional and prominent Japanese family that adapted brilliantly as their country evolved from a feudal to a modern state.[1] Her mother, Miyo Arai, was born in Connecticut. She was the child of wealthy silk importers who came to America in 1876, only 20 years after Commodore Matthew Perry ended Japan's isolation from the west. Miyo was raised and educated within an American frame of reference, yet she submitted to tradition when the time came for marriage. She wedded Shokuma Matsukata, a Yale graduate who had visited her family while attending school in New Haven. Matsukata's family included Prime Minister (later Prince) Masayoshi Matsukata and the industrialist Kojiro Matsukata, whose collection of western paintings were eventually housed in a museum bearing his name. The family's embrace of east and west is illustrated in their wedding photograph of May 1913, in which Shokuma wears a frock coat beside a kimono-clad Miyo.

After their marriage, the couple lived in Tokyo, but Miyo never fully integrated into Japanese society. It may have been loneliness that inspired her to embrace Christian Science while living in Japan. She shared the tenets of the religion with her children through personal example, in the choice of their tutor, Florence

Boynton, and at Principia College, a Christian Science school in Elsah, Illinois, where she sent the children to study. Miyé attended the school between 1940 and 1944, and was allowed to stay on campus during World War II, escaping the internment that many other Japanese suffered during this era.

Miyé Matsukata and her four siblings grew up in Tokyo in a bifurcated culture. The family grounds included occidental and Japanese structures, and European paintings hung in their home. The children were dressed in Western clothes and were given an American education. As a result, they were distanced from their peers and did not develop deep roots in Japanese society. Four of the five Matsukata children remained in the United States, and all pursued careers that reflected the duality of their cultural origins.[2]

Presentation Bowl with Lid, 1953
gold, silver
diameter 8"
School of Nations Museum, Principia College

Considered by her sister, Mari Bruck, to be "artistic" from an early age, Matsukata's artistic education began in her youth, when she was taught Japanese painting by a countryman. In 1962, Miyé recalled that as a child she would "sit on the floor by the hour and make many a copy of 'a bird on a stone in a stream.'"[3] She enjoyed drawing from nature, and learned the traditional female arts of flower arrangement and needlework. These studies were typical for their day and not an indication of Matsukata's predilection for the arts. In later years she referred to the pleasures of making jewelry in Japan, however her teacher is not known. Once at Principia, she majored in fine arts and participated in at least one jewelry class.

Following graduation, Matsukata attended the Museum School of the Museum of Fine Arts, in Boston, where she focused on metalwork under the direction of Joseph Sharrock, whose aesthetics were shaped by the arts and crafts movement. Matsukata's efforts at the Museum School were rewarded with various scholarships, including the Ruth A. Sturdivant Traveling Scholarship, which was awarded to her in 1948, the year of her graduation. The holloware that she fashioned at the Museum School included a fluted tea service with neoclassical references, and a pitcher in the Scandinavian style. The continuation of the latter aesthetic is evident in a covered vessel that she created for Principia College in 1953. The holloware demonstrated her mastery of the requisite silversmithing and design skills needed for graduation, but they foretold little of her future direction as an artist.

Using the funds from her traveling fellowship, Matsukata headed to Stockholm in 1950 to study with Swedish silversmith Baron Erik Fleming (1894-1954). Her inspiration for this visit may have originated with silversmith and jeweler Margret Craver (b. 1907), who had studied with Fleming in 1938. Craver probably met Matsukata about the time of her move to Boston in 1950.[4] Matsukata's encounter with Fleming and his restrained neoclassicism at the Atelier Borgila had a cathartic effect on the artist, who declared, "There, at last, I succeeded in driving the purely Japanese design out of my work, and achieved a style wrought from both East and West."[5]

"There, at last, I succeeded in driving the purely Japanese design out of my work, and achieved a style wrought from both East and West."

In 1949, Matsukata formed an association with two Museum School classmates, Janice Whipple Williams and Naomi Katz Harris. They decided to fashion jewelry and holloware under the name Janiyé, a synthesis of the women's first names. Their first gallery was located in a basement at 506 Beacon Street, and although the Janiyé name conjured elegance, a bit of mystery, and sophistication, the founders were both youthful and inexperienced. As with most studio jewelers of the period, their primary medium was silver. To make ends meet, they produced items for

Brooch, ca. 1968
gold, diamond, beach glass
Courtesy Atelier Janiyé

Cuff Bracelet, ca. 1970
rubies, sapphire, 14k and 18k gold
2 3/4 x 2 1/2 x 1 3/4"
Smithsonian American Art Museum, Gift of Alexander and Margit Matoltsy

Pendant Necklace, 1975
gold, lapis lazuli, coral, enamel
length 18 3/8"
Private collection
Photo: Steve Dillard

commercial clients, all the while endeavoring to create a reputation for themselves among a discerning clientele.[6] By 1958, marriage and career changes ended this group association, leaving Matsukata as the sole artist and proprietor of Janiyé.

For the first 15 years of her career, Matsukata took on all kinds of work and participated in numerous shows to advance her career, but success was elusive. The Matsukata family, once wealthy and powerful, was much reduced after the war, and the artist had only her own resources to depend upon. During this period she also designed simple items in silver, such as candle-snuffers, for production in Japan, but it is unclear whether these were profitable ventures.

Fortunately, her sister Haru (1905–1988) moved to the Boston area in the mid-1950s with her husband, Harvard professor Edwin O. Reischauer (1910–1990). Miyé was a frequent visitor to and occasional resident of the Reischauer home, where she was consulted on aesthetic matters, and where she found familial and occasionally financial support.[7]

By this date, her aesthetic path was firmly set upon the fabrication of unique ornaments. Well aware of jewelry's inconsequential presence in Japanese society, Matsukata was determined to establish her reputation in America as a maker of artistic jewelry. As she later stated, "When I first started making jewelry in Japan, craftsmen occupied small, dark workshops on unpopular streets and sold their jewelry to gift shops for a few yen. With that harsh point in mind, I rapidly decided that there would be no dark workshops or dark streets for me. For when you work with a piece of metal in order just to sell it, your horizons shrink."[8]

Determined to establish her "couture services in jewels," Matsukata took out a small loan and moved her studio in 1958 to a second floor gallery in Copley Square.[9] She engaged Providence furniture maker John Marcoux to create a handsomely appointed space with simple showcases and with shoji screens that framed a view of H.H. Richardson's Trinity Church. Adjacent to the showroom was a workshop with four workbenches, indicative of Matsukata's optimistic plans for the business. At about this date, the gallery name was changed to "Atelier Janiyé."

It was in 1966 that Matsukata found her true voice. With a second traveling fellowship from the Museum School,[10] she embarked upon an unforgettable voyage to Egypt and Greece. Deeply impressed by the ancient architectural shapes that she saw under brilliant blue skies, Matsukata recognized the artistic potential of natural and ancient, man-made environments and sought to evoke their monumentality in the form of jewelry. She was intrigued by the relationship of "antique architecture to the landscape—the position of a pyramid to the sky, the where and *how* the Parthenon was put together" and found in them a "universal timelessness" that she could crystallize in her jewelry.[11]

Deeply impressed by the ancient architectural shapes that she saw under brilliant blue skies, Matsukata recognized the artistic potential of natural and ancient, man-made environments and sought to evoke their monumentality in the form of jewelry.

The fitted, irregular shapes and worn contours of ancient stones served as a leitmotif for Matsukata's jewelry in the years following her 1966 trip. In order to achieve greater flexibility in her forms, she shifted from silver to gold, using malleable 24k gold over stronger alloys to create subtle color shifts and textures. The interstices were set with precious stones that glistened like water in a rock's crevice. The resulting works were visually massive despite their small scale. Matsukata drew attention to the

Miyé Matsukata and Impressions Workshop
25th Anniversary Print, Miyé Matsukata, 1975
lithograph
22 3/8 x 14 13/16"
Museum of Fine Arts, Boston, Gift of Emily and Laura Starr in memory of Helen G. Starr

new, sculptural quality of her jewelry by inviting comparisons with the work of Isamu Noguchi and Barbara Hepworth.[12]

A second inspiration from this trip came in the form of historic ornaments. Matsukata purchased ancient faience beads in Egypt, using their shapes and rich turquoise color as an inspiration for her own work. The creation of jewels that contained exotic or historic elements had been explored by American jewelers on several previous occasions. During the wave of historicism that followed the American arts and crafts movement, artists in all media explored a plethora of styles, from colonial American to Louis XIV. Jewelers and metalsmiths, however, often preferred to embed their works with sculptural elements from foreign or historic cultures. At the Rhode Island School of Design, design professor William Brigham (1885–1962) experimented with jewels, crystal, and carved stone from the Indian subcontinent. During the 1920s, New York artist Marie Zimmermann (1878–1972) enjoyed incorporating elements from foreign cultures into her work, sometimes featuring them in small reliquaries of her own design, and in the 1940s, Sam Kramer employed the occasional shell or taxidermy eye.[13]

Brooch, ca. 1972
gold, Egyptian faience, pearl
1 1/4 x 7/8"
Private collection

Matsukata's sensitivity to these small but powerful emissaries of time, earth, and culture can be documented to 1962, when she made jewelry featuring petrified mammoth and whale tusks carved by Inuits and Tlingit Indians, the offering of a friend.[14] These were the first of her many forays into artifacts from foreign and ancient cultures, for she deftly wove Peking glass, jade from the far east, and Mayan carvings into her jewelry. For Matsukata, these fragments enabled her to create fresh and original interpretations of world cultures.

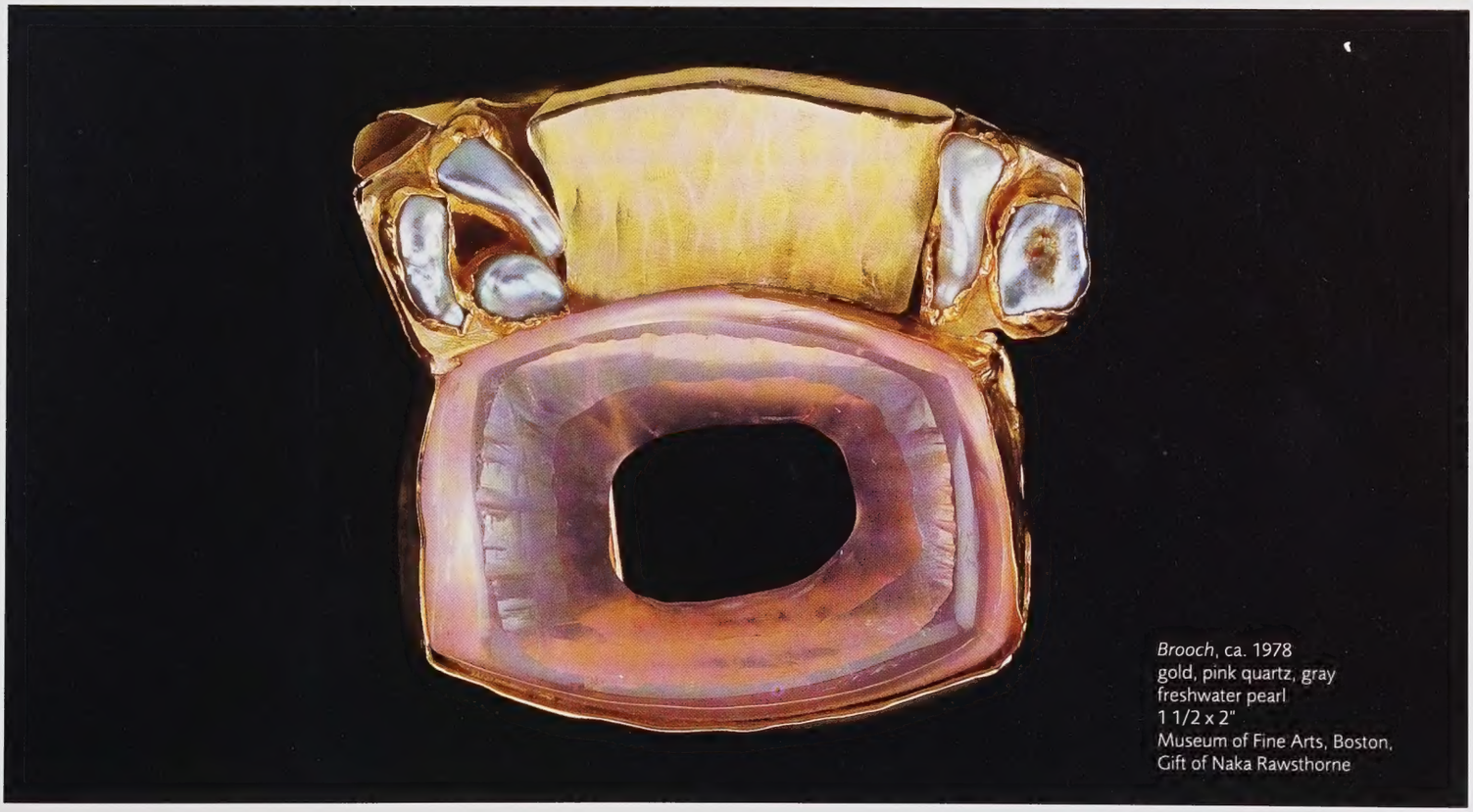
The faience beads no doubt opened her mind to the potential of found objects in works of art. First introduced by Marcel Duchamp in the early twentieth century, the found object was nonetheless a relatively new concept for jewelers. For Matsukata, it was a piece of slate discovered during her tour of Egypt that ignited her curiosity.[15] Soon after her return to Boston, she fashioned it into a brooch that quickly found a buyer. The success of the humble slate brooch and the popularity of the faience ornaments were the start of a rich and exciting period for Matsukata. It was not long before she began to set beach stones, glass and shells in gold settings, disregarding the field's traditional affinity for precious stones. In so doing, she attracted a devoted clientele, and inspired a new wave of contemporary jewelry.

Despite her unorthodox use of historic beads, fragments, and organic and found objects, Matsukata expertly transformed them into a collage of arresting, abstract designs of high-carat gold. Her chief preference was for asymmetrical design, a trait she credited to her Japanese upbringing.[16] She experimented freely with gold, using the material to give shape and structure to the jewelry and to support the stones without resorting to the ubiquitous Tiffany-style settings. Her jewelry found favor among an affluent, well-educated clientele who sought to adorn themselves with something more than the standard tropes offered by luxury jewelers that were dependent upon expensive stones, invisible or conventional settings, and stock imagery.

These were the first of her many forays into artifacts from foreign and ancient cultures, for she deftly wove Peking glass, jade from the far east, and Mayan carvings into her jewelry.

This is not to say that Matsukata did not use precious stones. On the contrary, she worked regularly with them, although she apparently preferred cabochons for their softly glowing surfaces. It was not uncommon for clients to bring their own gems to her studio so that she could integrate them into new designs. Following a trip to India and Nepal in 1979, Matsukata began to use small cabochons in an impressionist manner. For

Pendant and Chain, 1971
24k gold, sterling silver, Mayan bone artifact of a human figure
pendant: 2 3/8 x 1 5/8 x 1/2"
The Museum of Fine Arts, Houston; Helen Williams Drutt Collection



Brooch, ca. 1978
gold, pink quartz, gray freshwater pearl
1 1/2 x 2"
Museum of Fine Arts, Boston, Gift of Naka Rawsthorne

"Srinagar" Necklace, 1979
gold, freshwater pearls, rubies, peridot, sapphires, and jade cabochons
pendant: 1 1/2 x 2"
Museum of Fine Arts, Boston, Gift of Alexandra Solowij Watkins
Photograph courtesy Atelier Janiyé

made of wire and set in rich colors.[18]

Matsukata's early involvement with the World Crafts Council and the Society of North American Goldsmiths, and her early participation in leading exhibitions in the United States, France, and Japan, quickly raised her profile among collectors and jewelers. In 1968, while her sister Haru was living in Japan as the wife of Ambassador Reischauer, Matsukata was invited to mount a show in Tokyo at the Okakyu Department Store. Sponsored by Mikimoto and the English-language newspaper *Yomiuri Shimbun*, the exhibition occupied an entire floor of the store and included the works of Olaf Skoogfors and Stanley Lechtzin.[19] At the Plaza Hotel in New York, she was included in the 1972 Sculpture to Wear exhibition, where her jewelry was seen in the context of such international luminaries as Picasso, Man Ray, Calder, Pol Bury, Pepper, and Pomodoro.[20] In 1974, the Albright-

Rather than imposing her will upon the task of making original work, she allowed her faience beads and uncut gems to lead her down unexplored paths toward an intuitive kind of creation that often surprised the artist herself.

example, she commemorated her stop in Srinagar, a city famous for its canals, houseboats, and Mughal gardens, by stringing pearls with jade, sapphire, and ruby cabochons on a woven ground of gold wire to create an abstract landscape of water, trees, and sky. Her appreciation of the beauty of gemstones in all its forms led to ornaments that complemented the lines and colors of uncut stones.

Her loose and sketch-like approach to creating landscape with cabochons was repeated in her enamelwork, which gained momentum during the mid 1970s. Travel to faraway locales as disparate as Luxor and Salzburg, and as close as Boston's Charles River inspired her to create pendants, rings, and brooches. William Harper recalled how honored he was to have Matsukata as a visiting artist who attended his Penland course in 1972.[17] Harper's highly personal approach to enamel design was probably appealing to Matsukata, who ignored the rules for the medium in the same way she did with jewelry and fashioned lively sketches

Knox Art Gallery opened "Masterworks of the '70s: Jewelers, Weavers," which featured Matsukata's jewelry along with that of American studio artists Skoogfors, Irena Brynner, Robert Ebendorf, and Arlene Fisch, and with weavers Sheila Hicks and Trude Guermonprez. And in 1975, Matsukata celebrated her twenty-fifth year as a jeweler with a lithograph that featured a necklace made of lapis lazuli, enamel, and gold.

Meanwhile, she continued to create bold, abstract ornaments with the support of a talented workshop. Lapidary James Hubbard (d. 1983) delivered gems of unique shapes to suit the artist's designs and served as business manager Members of the Janiyé workshop by the mid 1970s included fellow Museum School graduates Alexandra Solowij Watkins, Nancy Michel, and Japanese-born Yoshiko Yamamoto. The women attested to the freedom they enjoyed in interpreting Matsukata's designs, and the pleasure of working with her to achieve a result of which they all could be proud.[21]

But Matsukata's life ended too soon. A

commemorative exhibition at the Boston Athenaeum in 1982 brought together many of her greatest achievements, but no catalogue was published and her achievements went unrecognized by her peers.[22]

The first attempt to collect her work was made by Watkins and Michel, who have maintained Atelier Janiyé since Matsukata's death. In 1991 they asked the artist's clients to make gifts of her jewelry to the Museum of Fine Arts in Boston, an appropriate location given her graduation from the Museum School. The fruits of their labors are evident in some of the works illustrated in this essay.[23]

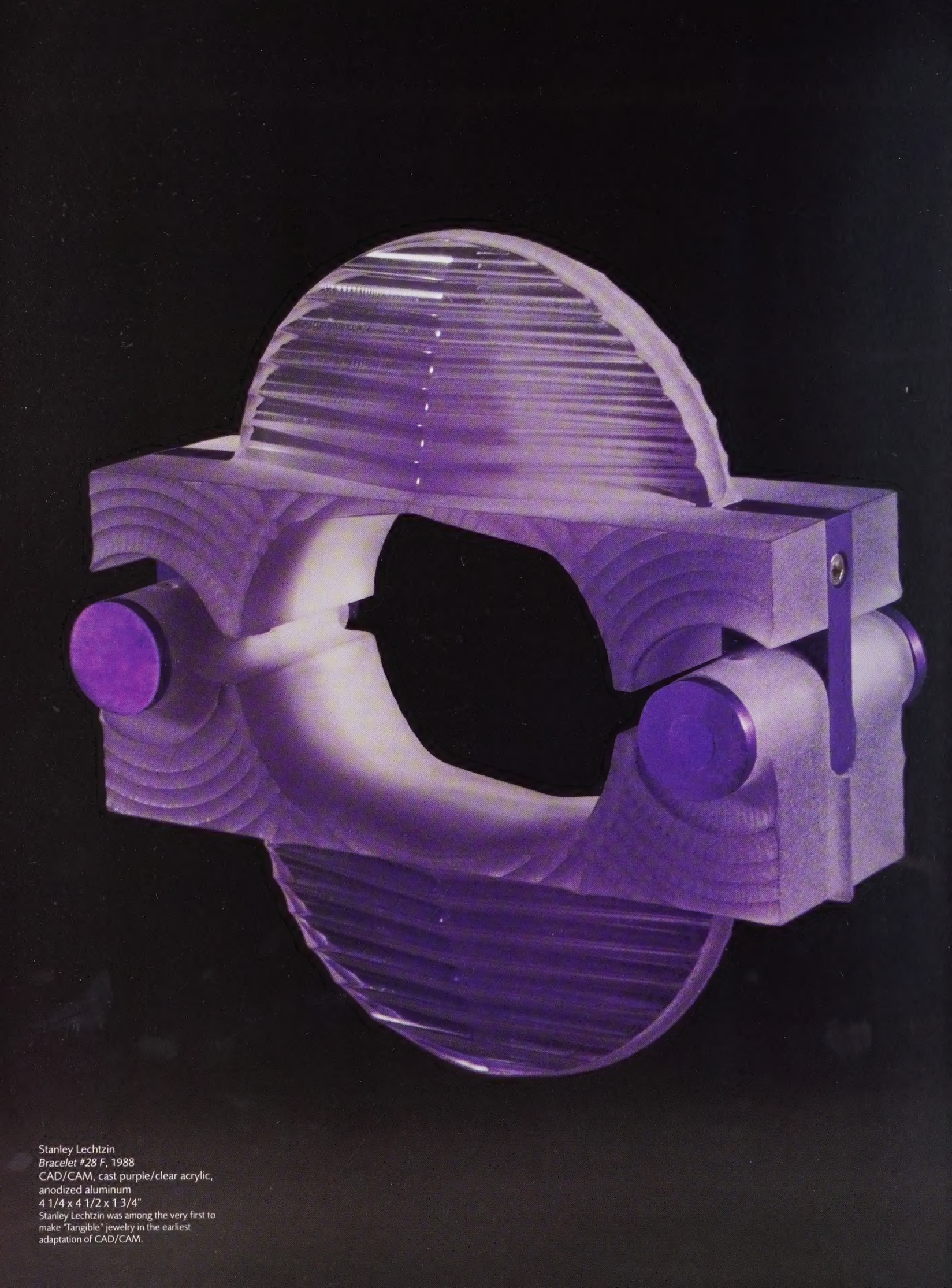
In an article that Matsukata wrote in 1974, the artist attempted to describe her process of creating art, and addressed the artist's classic conundrum when facing a blank sheet—how to "see new ways for what already exists." For Matsukata, finding the "new way" of seeing required subjugating the ego. Rather than imposing her will upon the task of making original work, she allowed her faience beads and uncut gems to lead her down unexplored paths toward an intuitive kind of creation that often surprised the artist herself.[24] Considered by her colleague, Stanley Lechtztin, as one of the "star performers" among twentieth-century jewelers, Miyé Matsukata created a memorable body of work that speaks eloquently of her relationship to volume and color, culture and earth, textures and forms. ✠

Ring (with view from Mozart's home), ca. 1981
gold, garnet, enamel
height 1 1/8 x 3/4"
Museum of Fine Arts, Boston, Gift of Nancy Wills Michel
Photograph courtesy Atelier Janiyé

Jeannine Falino is an independent curator and the former Carolyn and Peter Lynch Curator of Decorative Art, Art of the Americas, Museum of Fine Arts, Boston.

Special thanks to the following for their assistance with this essay: Linda Abegglen; Alexandra Solowij Watkins and Nancy Michel, Atelier Janiyé; Leigh Montgomery, *Christian Science Monitor*; Margret Craver; Helen Drutt; Rena Koopman; Jennifer Riley, Museum of Fine Arts, Boston; Yoshiko Yamamoto and Paul McAlpine, Museum School, Museum of Fine Arts, Boston; Cindi Strauss, Museum of Fine Arts, Houston; Jane Pfeiffer, The Principia; Kaitlin Shinnick, Skinner, Inc.; Stanley Lechtzin, Tyler School of Art; Hina Hirayama, Boston Athenaeum.

1 The Matsukata family history recounted in this article is indebted to Haru Matsukata Reischauer, *Samurai and Silk: A Japanese and American Heritage* (Cambridge: The Belknap Press, 1986), 1–4, 15–17.
2 Matsukata became a United States citizen in 1950. Miyé Matsukata papers, Archives of American Arts, Smithsonian Institution, roll 4495.
3 Nan Trent, "Miyé Matsukata Leads Jewelry into New Forms," *Christian Science Monitor* 20 February 1962, p. 13.
4 In 1950, Craver married Charles Withers, then president of Towle Manufacturing of Newburyport, Massachusetts. Jeannine Falino and Yvonne Markowitz, "Margret Craver, a foremost 20th-century jeweler and educator," *Jewelry, The Journal of the American Society of Jewelry Historians* 1 (1996–1997): 8–23.
5 Trent, "Miyé Matsukata Leads Jewelry into New Forms."
6 Matsukata demonstrated her skills as an inventive businesswoman even while she was attending the Museum School. According to the November 1946 issue of *The Purpose*, the alumni magazine of Principia College, Matsukata and Eleanor Mott produced "silk printing on blouses, luncheon sets, scarves, and curtains."
7 Reischauer spent his youth in Japan as the son of American missionaries. Fluent in Japanese, he led Harvard's East Asian studies program to prominence. From 1961 to 1966 he served as ambassador to Japan with his second wife, Haru Matsukata, whom he married in 1956.
8 Miyé Matsukata, "The Art of Miyé Matsukata," *Christian Science Monitor*, 30 July 1974, p. 13.
9 The gallery was located at 551 Boylston Street, Boston, Massachusetts. A gallery announcement dated 1980 was titled "Couture Jewels." I am grateful to Alexandra Watkins and Nancy Michel for sharing this with me.
10 The Clarissa Bartlett Traveling Scholarship was awarded to her in 1965.
11 Matsukata, "The Art of Miyé Matsukata." The artist took part in a group trip sponsored by the Museum of Fine Arts in Boston.
12 Matsukata, "The Art of Miyé Matsukata."
13 For an illustration of Brigham's work, see Marilee Meyer et al, *Inspiring Reform, Boston's Arts and Crafts Movement* (Wellesley: Davis Museum and Cultural Center, 1997), cat. 56. For Zimmermann, see David Cole, "Marie Zimmermann: From Tiaras to Tombstones," *Metalsmith* (Winter 2005): 26–35.
14 Trent, "Miyé Matsukata Leads Jewelry into New Forms."
15 Charlotte Saikowski, "The design speaks," *Christian Science Monitor* 20 May 1968, p. 6.
16 Matsukata, "The Art of Miyé Matsukata."
17 William Harper, interviewed by Harold B. Nelson, January 12–13, 2004, Archives of American Art, Nanette L. Laitman Documentation Project for Craft and Decorative Art in America, Smithsonian Institution.
18 *Metal Forms* (Brockton, Ma.: Brockton Art Center-Fuller Memorial, 1975) [Exhibition Nov. 20, 1975-February 6, 1976].
19 See Saikowski, "The design speaks," for a review of the exhibition. Stanley Lechtzin recalled that the exhibition, partly sponsored by Mikimoto, was intended to introduce the Japanese public to the concept of personal jewelry.
20 This exhibition was apparently reprised in *Jewelry as Sculpture as Jewelry* (Boston: Institute of Contemporary Art, 1973) [Exhibition dates November 28-December 21, 1973]. Matsukata's last show was held in 1979 at Boston's Art Asia Gallery.
21 Yamamoto now teaches at the Museum School, Museum of Fine Arts, Boston.
22 Robert Cardinale's 1984 article was the only one published after the artist's death.
23 Additional jewelry in the permanent collection of the Museum of Fine Arts, Boston, includes a diamond and gold ring (1991.740); gold brooch with amethyst and eye-of-Horus faience (1991.756); silver and amber necklace (1996.218); choker with ancient coin (1996.219); and pair of gold and ebony earrings (2003.312.1-2).



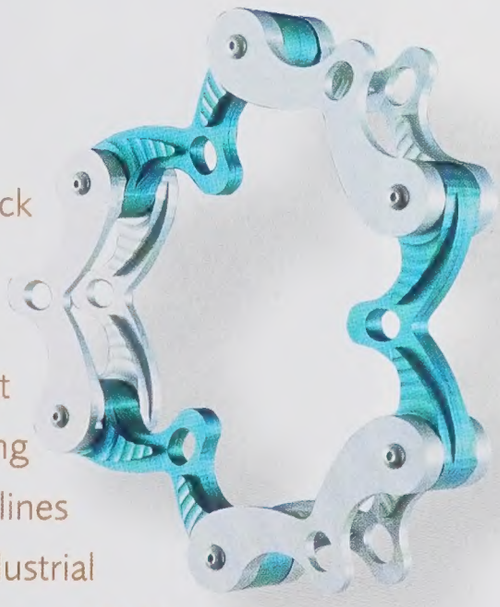
Stanley Lechtzin
Bracelet #28 F, 1988
CAD/CAM, cast purple/clear acrylic, anodized aluminum
4 1/4 x 4 1/2 x 1 3/4"
Stanley Lechtzin was among the very first to make "Tangible" jewelry in the earliest adaptation of CAD/CAM.

This is the first in a two-part series exploring the role of digital technologies within the metalsmithing field. The sequel will follow in the Fall 2005 issue of *Metalsmith*.

Influence of the Digital

Context and Form

by Douglas Bucci and Matthew Hollern



Kim Tatalick
Rivet Bracelet, 1996
CAD/CAM, aluminum, stainless steel, springs
4 x 4 x 1"
Rivet Bracelet by Kim Tatalick was the first complete student CAD/CAM piece to be made tangible by CNC milling at Tyler School of Art, Philadelphia, in 1996.

Digital technologies are rooted in machines that date back to the Jacquard loom of the early nineteenth century. In the 200 years that followed, technologies and digital information have evolved into a bona fide "medium" that has redefined the arts, broadening horizons and changing both the practice and the production of countless disciplines including graphic design, photography, architecture, industrial design, jewelry, and metalsmithing. Computer-Aided-Design (CAD) and Computer-Aided-Manufacturing (CAM) present important questions for professionals and educators in our field. What are the implications of digital technologies, and how are designers, craftspersons, and educators addressing them? In what ways have individuals adopted and pioneered "the digital" as a means of rethinking, designing, and making the new generation of objects in our discipline?

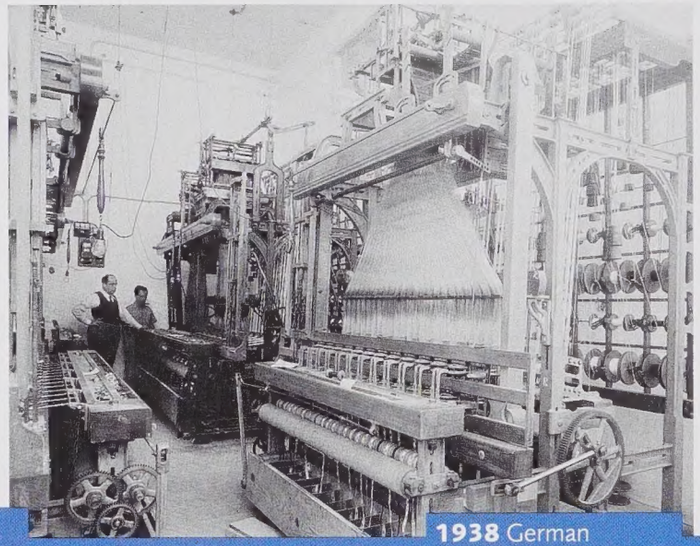
In this postmodern, highly industrialized information age, the meaning of Craft is being redefined. As our society continues to change, we are challenged to produce work reflecting a new mantra, "Truth to Context." Artist and author Stephen Wilson observes:

> The challenge facing artists in our technological era is unprecedented. They are desperately needed as interpreters of culture. The whirlwinds of discovery in the sciences and other fields have contributed to a lopsided cultural development...To help draw out the implications of this era, artists must achieve a deeper knowledge. They must come to know the worldviews, work styles, and traditions of the sciences while keeping alive the holism, iconoclasm, and celebratory attitude of the arts.[1]

From the earliest appropriation of electronic and digital devices to the most recent generation of CAD/CAM-based jewelry and objects, the past four decades have witnessed significant efforts by artists to explore and advance the technological horizon. As significant new ground continues to be broken, we must participate in the evolution of this medium, frame it within its greater historical context, and acknowledge the influence of the digital on the jewelry and metalsmithing disciplines.

The act of making has recorded our existence, reflected our humanity, and brought the marriage of aesthetics and utility to our lives through objects of art and design. Today, makers work in many mediums and serve many roles, from providing objects of everyday utility to interpreting our very existence. As we consider the precedence of making, we are challenged to recognize the role of digital technology in a field so long defined by the hand. Yet when we review critical moments in the history of making—revolutions spurred by invention—we must also look forward and imagine the possibilities. What will history record as the significant objects of our time?

Throughout history, the arts have been redefined by discovery and technological invention, from systems of visualization and representation to whole new mediums, from perspective drawing, to photography, to CAD/CAM. Today, we live in a remarkable age where digital information has the potential to both describe and generate tangible form. Even so, it is often said that the computer is just another new tool, raising the question, within a digital process, what is analogous to "material?" It is the stuff shaped by tools and processes that crosses all boundaries; it is information. Beyond the computer, information



Jacquard loom in ribbon and woven label factory, Palestine, ca. 1935
Library of Congress, Prints and Photographs Division

1806 Joseph-Marie Jacquard put into use the first Jacquard loom, which could weave patterns according to encoded instructions.

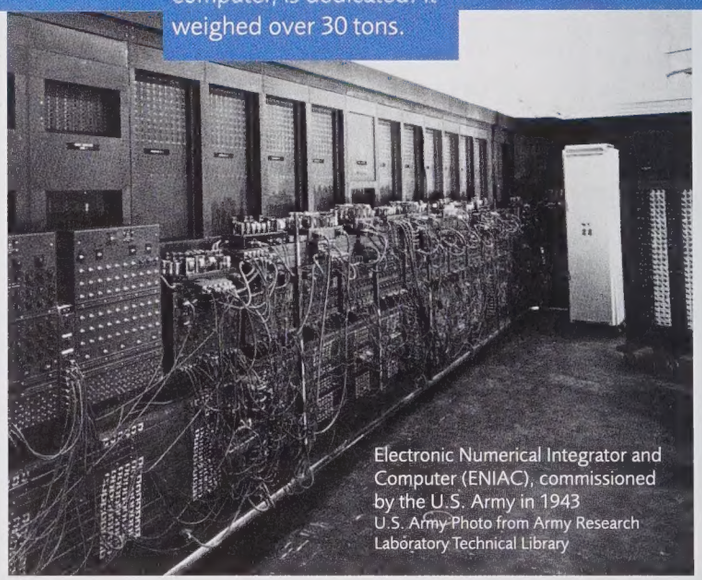
1822 Charles Babbage develops the "Difference Engine," designed to calculate tables correct to 31 significant digits.

1938 German scientist Konrad Zuse completes the Z1, the first working computer to use binary code.

1945 ENIAC, the Electronic Numerical Integrator And Computer, generally conceded to be the first all-purpose stored-program electronic computer, is dedicated. It weighed over 30 tons.

1961 The integrated circuit, AKA "the chip," is patented by Robert Noyce.

technologies provide a complex set of tools that affect the creative process in significant ways. In *Abstracting Craft: The Practiced Digital Hand*, Malcolm McCullough explores the foundations of human, technological, and personal contexts. He reassesses the attributes of a medium, defining "engagement," "affordance," and "constraint" as concepts that broaden the scope of "craft" to include the digital. McCullough suggests:



Electronic Numerical Integrator and Computer (ENIAC), commissioned by the U.S. Army in 1943
U.S. Army Photo from Army Research Laboratory Technical Library

> When the tools are complex, when the artifacts produced are abstract, or when tools provide the only access to the medium (all common conditions in high technology), it can be difficult to say where a tool ends and a medium begins. But we can say that under skilled practice even these tools become transparent, and that a sense of medium eventually emerges.[2]

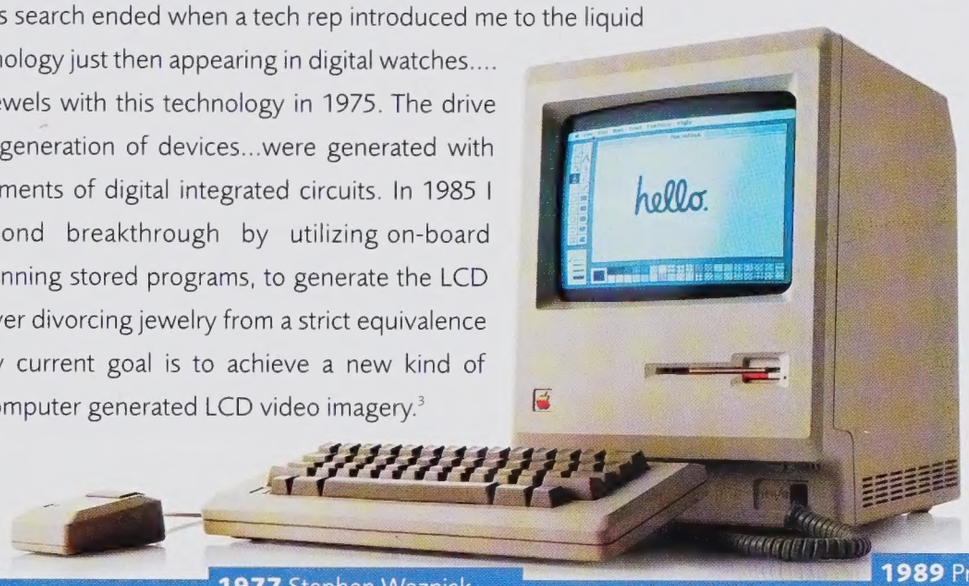
The evolution of a digital medium may involve many stages of development and varied strategies, as pioneers "appropriate" materials and devices and "adapt" technologies, from the earliest limited pool of applications to a vast array of CAD and CAM products and services. It is during such exploration and adaptation that the defining elements of a new medium begin to emerge.

In the early 1970s, Mary Anne Scherr applied her skills as a designer to adapt biomedical technologies of

the period and create aesthetic and wearable personal monitors. Her work demonstrated the potential for the integration of technology in jewelry, and the humanistic values that design can include. The work changed our understanding of what it can mean to be a jewelry designer.

As early as 1974, Vernon Reed was working to engage technology as a new kind of jewelry. In 1987, as a participant in the Innovations/Applications Symposium on Technological Pioneers in Metalsmithing, Reed stated:

> I began a search for a truly advanced technology appropriate for moving jewelry into the information age; this search ended when a tech rep introduced me to the liquid crystal display technology just then appearing in digital watches.... I created my first jewels with this technology in 1975. The drive signals in this first generation of devices...were generated with hard-wired arrangements of digital integrated circuits. In 1985 I achieved my second breakthrough by utilizing on-board microcomputers, running stored programs, to generate the LCD drive signals—forever divorcing jewelry from a strict equivalence with hardware. My current goal is to achieve a new kind of jewelry based on computer generated LCD video imagery.[3]



"Mac Classic" Macintosh Computer, 1984
Courtesy Media Services, Apple Inc.

1964 IBM develops the first CAD system, the system 2250.

1973 Alto, the first "office computer" is developed at Xerox Parc.

1977 Stephen Wozniak and Steven Jobs introduce the Apple II, the first personal computer available only as an assembled unit.

1984 Apple introduces the Macintosh, a graphics-based microcomputer using icons and a mouse and an intuitive user interface.

1989 Professor Stanley Lechtzin teaches the first college course in CAD/CAM for jewelry at Tyler School of Art, Temple University.

Reed's cybernetic jewelry explored and adapted emerging technologies, and began to address the potential for interactivity and complex communication. His use of technology also made manifest Marshall McLuhan's dictum: "the medium is the message."

Early pioneers of CAD/CAM include Stanley Lechtzin, who recognized that the personal computer would have significant ramifications for our field. His first digital work focused on the exploration of CAD for three-dimensional modeling and CAM for 2 1/2 axis milling. His commitment to adapting and exploring the potential of the medium has perpetuated new and innovative work. In 1987 he stated:

> Countless artists are utilizing the technologies of the past and are proving that there are always new insights and discoveries to be made even while exploring what superficially may appear to be well-charted territory. Some of us, however, choose to work with the technology of our own generation and become as familiar with it as with the traditional ones. This becomes the means through which the contemporary artist may create aesthetic values and realize new possibilities for artistic expression. If we wish to speak to and about our time, is there a better medium to use than the technology developed by this highly industrialized society? [4]

Lechtzin's work has explored the potential of CNC (Computer Numerical Control) technologies, and over the past decade, the adaptation of rapid prototyping systems and materials. More significantly, the work has challenged long-standing attitudes about the role of digital technologies in craft. The program at the Tyler School of Art has addressed digital technologies since the first CAD/CAM class was offered in 1989.

In the digital environment, information is mediated to facilitate the creation and use of tools, processes, and all manner of forms, all within one work-flow. To design in this medium is to be the author of the process and the product, the concept and the craft. The freedom to move back and forth through the history of a process, and the fluid relationship between process and product are unique to digital design.

Digital design also redefines the role of modeling in the making process. In computer modeling, the manipulation of information marks the paradigm shift in studio methodology, and recognizes the activity of "modeling" as "making." A traditional metalsmith may be analogous to the surgeon; in order to transform the subject, a tool can be directly applied to the physical form. To engage in computer modeling is to act in a manner closer to a geneticist, who may manipulate data, essentially changing the "DNA" and the form that it describes. When this mediated experience in the creation of an object is combined with a means to materialization, it represents the marriage of digital design and craft.

Digital technologies are ubiquitous, and have evolved and diversified to a level of complexity and potential unlike any previous technology or medium. They are arguably of such great reach and versatility as to suggest a "meta-medium," one that transcends the scope of material-based media of art and design. The digital is redefining the meaning of "medium" and what it means to "design," "model," and "make." The creative process is broadened and new language necessary for critical discourse is now taking hold.

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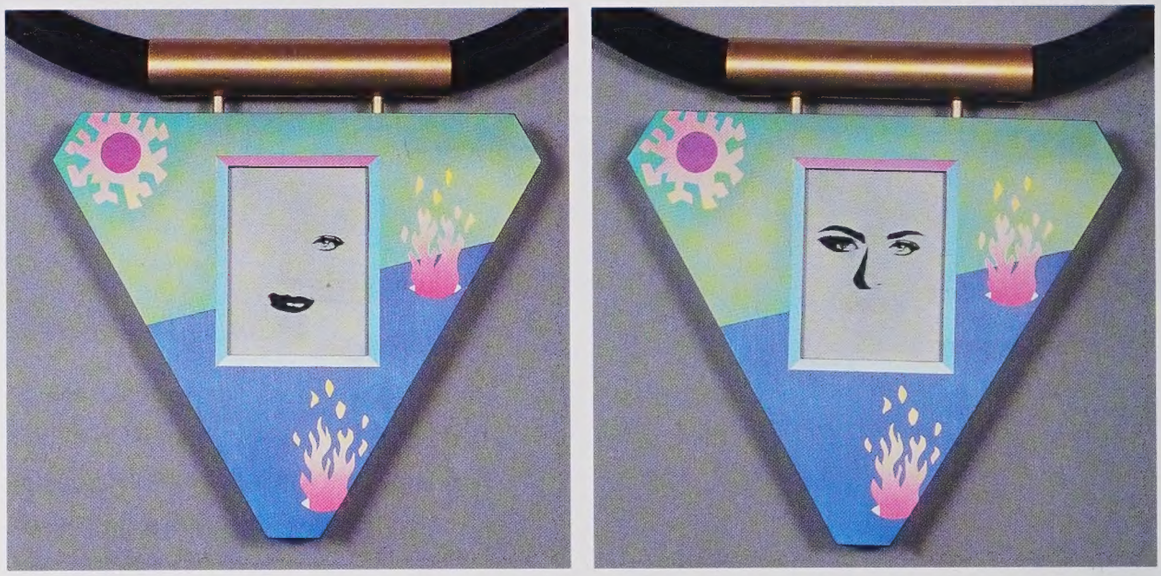

Vernon Reed
Visage Mnemonique (two sequential views), 1987
Wearable micro-system with software controlled LCD
3 1/2 x 3 1/2 x 1/2"
Reed describes this piece: "The onboard computer's software presents the parts of a face in the LCD, but importantly it monitors its own execution and never allows the entire face to be seen at once, forcing the viewer to assemble the face in visual memory. This allows for some very interesting questions about the locus of the aesthetic entity—questions that simply could not be raised with non-cybernetic media."

It is essential to our field that we expand, adopt, and assimilate the language associated with making. We must be able to articulate, identify, and describe what we are attempting to create whether we can hold it in our hands or visualize it on a computer monitor. Digital vocabulary or "form language" has been adopted by the jewelry and metalsmithing fields. Author Michael Schrage notes:

> Different prototyping cultures develop their own languages and vocabularies. Understanding a given prototyping culture without learning its language is like trying to understand accounting without numbers.[5]

Not since the publication of Heikki Seppä's *Form Emphasis for Metalsmiths* in 1978 have the jewelry and metalsmithing disciplines had a defining moment to adopt nomenclature and introduce a formal language to describe a system of form generation. Seppä wrote:

> Artists in seeking to express their ideas must employ a medium, be it as lasting as marble or as ephemeral as a whisper. A superficial knowledge of the medium limits the possibilities of expression, and leads to atrophy of the creative impulse, whereas the discovery of new modes of expression is the continuing of all artists.[6]

Existing somewhere between the marble and a whisper lives the digital medium, boundless in possibilities for liberating the creative impulse.

Digital form language is driven by our need to articulate what we intend to accomplish. This new

Mary Ann Scherr
Body Monitor: Heart Sensor Necklace,
ca. 1970
fiber optics, gold, silver, electronics, LEDs
5 1/2 x 10 1/2 x 1/2"

discourse is not only a "form" language, but also a "formal" language that allows us to identify exactly what we are creating according to the state of a digital artifact. The evolution of a digitally generated form has origins in the physical world, where people begin to develop an understanding of what the form is and how it exists. Is the form cylindrical, spherical, or cubical? What is it made of? What is the density? Is the form a solid mass or a hollow shell? These are questions we begin to answer in the physical world, although if we are to truly evaluate what we are creating we must move these objects into the virtual realm. Important new vocabulary such as "Virtual," "Actual," and "Tangible" were set forth by students and faculty on the Tyler School of Art/Temple University ACMET-L list serve over the last decade. These terms establish the definitions needed to articulate and represent different modes of working.

The "virtual," as defined by Webster's, is "a hypothetical particle whose existence is inferred from indirect evidence." This indirect evidence refers to something "real": the artist's imagination. A virtual object is constructed by valid digital data made up of real numbers that are essential to form existence. The virtual object does exist, even if only as potential.

What is created does not necessarily culminate in a useable form that exists in the physical world. "Virtual" has also been defined as "an object created in 3-D computer space, which is meant to exist and can only exist in the digital environment."[7] Virtual reality provides the freedom for greater visualization, allowing us to interact with a concept at every level of development, and push a concept free from concerns for safety, materials, manufacturability, ergonomics, or even gravity. The technology allows us to imagine what could be tangible—to create the objects of our dreams, desires, and visions even if only on a screen. We can envision what does not yet exist and this allows for future innovation.

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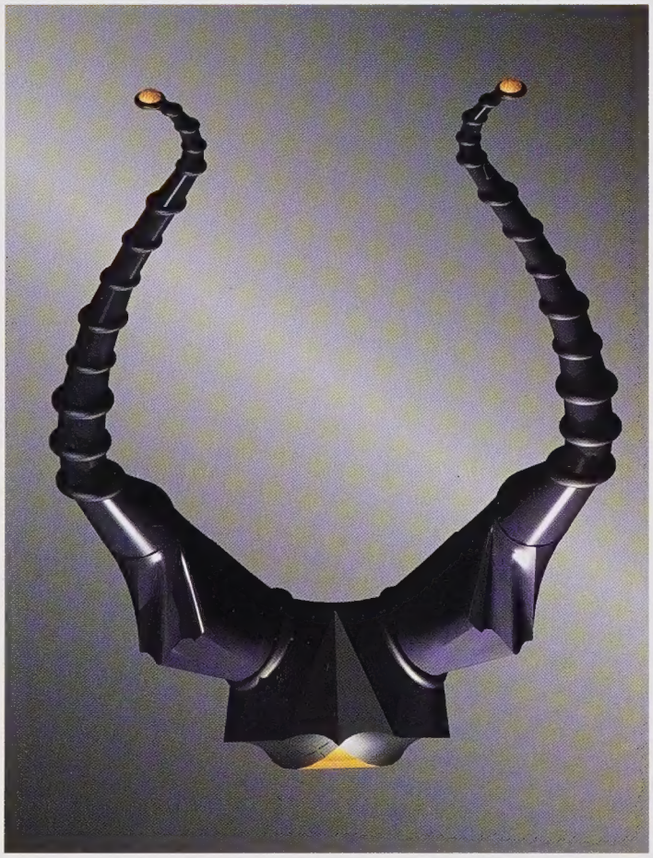


Margaret Yaukey
Collard, 1995
"Virtual" neckpiece (resin, gold, rubber)
9 x 7 x 1"
About working in the virtual dimension, Yaukey states: "Virtual objects were not designed with the intention that they would be realized through a particular process. Their value is purely as virtual objects."

Apart from the Virtual, and related to the Tangible is the Actual. "Actual" defines a different intent, a manifestation defined as: "A complete 3-D object, created in computer space, that currently exists in digital form, which if processed via computer controlled fabrication, will result in a physical object."[8]

"Actual" affords problem solving and consideration that may result in a tangible. If the piece is to become tangible, consideration must be given to its purpose and real-world applications. Is the piece going to function properly based on the parameters used to construct it? Have wall thicknesses been properly considered and will they function as intended? This information is based on real world experience and professional expertise that enable the designer to plan effectively. If a plan is not carefully calculated in the "actual" state, the design could yield unexpected or undesirable results. For example, if a student is modeling a ring for the very first time, they may not make the connection that the mass of the wax is far less than the metal, and when cast the ring will be far too heavy to wear. This is a necessary consideration, whether the piece was created by hand, or digitally generated and rapid prototyped. The challenge

inherent in the expression of a CAD object is making the engineering and creative processes merge. Even if the finished tangible object is dubious, however, the nature of CAD and rapid prototyping allows the designer to infinitely edit the file data, and produce "periodic prototypes" and "iterations." An objective for the "actual" is to create a three-dimensional sketch and rough out a working model. "Actual" marks the point where three-dimensional data may begin its transformations from the virtual into the physical world.

Not until we concern ourselves with bringing a concept into the physical world do we begin applying knowledge of the tangible. The tangible is also sometimes referred to as the prototype. The prototype is a manifestation that provides a visual or working model, or a finished form. Tangible forms have typically resulted from an analog process roughed-out by hand or accurately machined, therefore they have been a direct result of the physical world.

The "tangible" is a result of computer-aided manufacturing (CAM), or "rapid prototyping" (RP), not traditional prototyping. Rapid prototyping denotes the fast rate at which objects can be made, and represents a vast array of new materials and technologies constantly being developed.

Traditional handmade jewelry has always been based in the physical world of the bench top. While this method has allowed for creative freedom, the designs cannot be completely visualized until they are almost entirely constructed. The virtual world is the digital space that exists between concept and construct. This virtual environment allows an idea to be conceived, designed, and created—on a screen—before the object is made tangible. The artist therefore gains an enormous amount of freedom and time. In addition to the ability to experiment with changes, there are other aspects of CAD that afford new freedoms never imagined. Form analysis, material studies, and the relationship between forms can be accurately and swiftly explored in the virtual environment. With traditional making, we can do nothing more than make relative estimates about these most important facets of our designs. The artist is no longer bound by the limits of tools or their own dexterity. They are free to focus on their ideas.

Margaret Yaukey
Batear, 1995
"Actual" bracelet (black Delrin, brass, chrome)
4 1/2 x 3 1/4 x 1 1/4"
According to Yaukey: "The bracelet *Batear* was specifically created in such a way that it could be realized through the use of a 3-axis CNC (computer numerically controlled) milling machine."

Innovative forms, materials, and processes result from our will to evolve products outside of the virtual world—onto our bodies and into our homes—but it also ties us into a richer relationship between art and science. By applying the objectivity of science to the subjective nature of art we are creating a truly cross-disciplinary approach to the studio. The dynamic nature of the digital environment allows us to envision anew the world around us; it transports us to new levels of ability to see and to act, to design and to create, and allows us to reflect our values, record our time, and reveal the spirit of the age. ⧓

Douglas Bucci is faculty in the Jewelry/Metals area of the 3D Fine Arts Department at Moore College of Art and Design in Philadelphia, where he maintains an active studio.

Matthew Hollern is Dean of Craft and Design Disciplines at The Cleveland Institute of Art, where he teaches jewelry, metals, and CAD/CAM.

1 Stephen Wilson, "Artists as Explorers of the Technological Frontier," *Academic Computing* (1987).
2 Malcolm McCullough, *Abstracting Craft: The Practiced Digital Hand* (Cambridge, MA: The MIT Press, 1996), 193.
3 Vernon Reed, Artist Statement, "Innovations / Applications: Technological Pioneers in Metalsmithing," Tyler School of Art, 1987.
4 Stanley Lechtzin, Artist Statement (http://www.temple.edu/crafts/public html/mjcc/bios/sta lechtzin.html).
5 Michael Schrage, *Serious Play: How the World's Best Companies Simulate to Innovate* (Boston: Harvard Business School Press, 2000), 15.
6 Heikki Seppä, *Form Emphasis for Metalsmiths* (Kent, Ohio: The Kent State University Press, 1978), viii - ix.
7 Metals/Jewelry/CAD-CAM Department Tyler School of Art/Temple University, 2004 (http://www.temple.edu/crafts/public html/mjcc/mjcc.html) [January 1, 2005].

Object of Contemplation, 2001
copper, bronze, patina with polychrome
6 x 6 x 3"

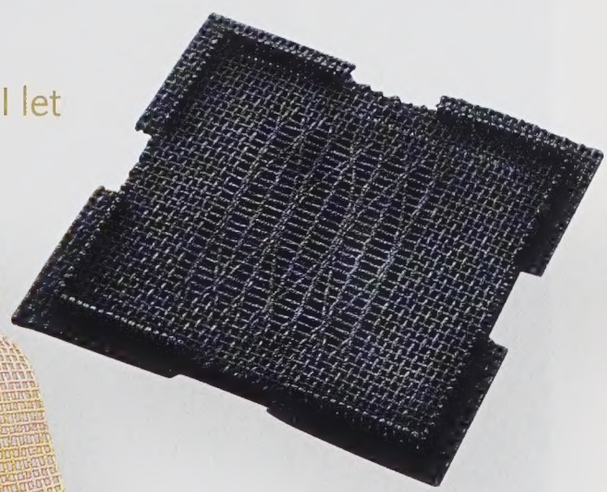
Dennis Nahabetian's Grids

Relaxing into Openness

by Tacey A. Rosolowski

I don't impose my will as often as I should on my hands. I let them move .... It's almost like massage, they massage the mesh.[1]

Dennis Nahabetian



left:
Harmonic Resonance (brooch) from "Time Signature" series, 1997
copper, 24k gold plate, 14k gold
3 x 3 x 3/8"

above:
Finale Chord (brooch) from "Time Signature" series, 1997
copper, 14k gold, patina
3 x 3 x 3/8"

Since 1991, Dennis Nahabetian has been working wire mesh into forms that relax the boundaries between metal and fiber art. The grid itself inspires him. The material, he says, is "so flawless that it demands perfection" in both execution and concept; Nahabetian's mind and hands work intuitively, often analogically, with lateral moves that produce unexpected linkages. His jewelry melds music and image; his vessels bend and curve with the laws of organic geometry.[2] Never mere pattern or texture, the grid *is* Nahabetian's essential substrate, the never-masked carrier of color, form, and emotional impact in work that communicates sensual allure and serene dignity.

Take *Object of Contemplation* (2001). The eye may follow linear patterns of dots across swollen surfaces or lose itself in the shivering moiré effects created as the grid distorts. Eventually the eye pauses before shadowy abysses, hovering precariously by the *omphalos*—the form's erotically framed navel—a center and conduit to this organic form's depths. "It's ironic," Nahabetian admits, "that I use the term 'linear' for the work because my mind is far from linear." Valleys capture his imagination; so does the region—so much more than a *line*—where lips join or the bulge of a buttock turns into the curve of the back. When he learned to swim, he recalls, he would instinctively sink to the pool bottom. "I'd stick my nose along the corners. I was looking for the interesting area of topographical change." *Object* enfolds

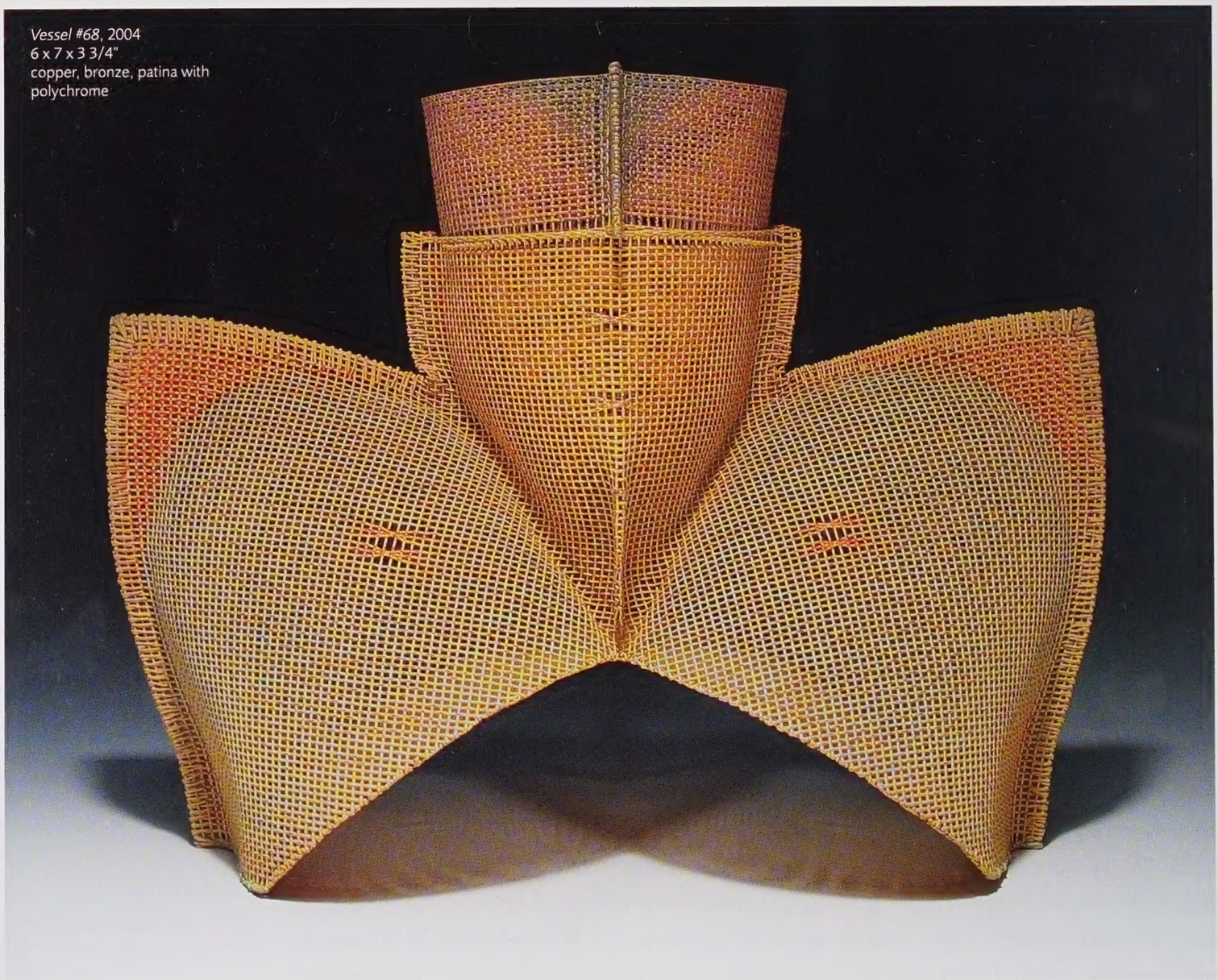
the viewer in a topography so changeful it seems in motion—colors flickering and surfaces billowing, sensually and yet within symmetrical parameters.

Nahabetian attributes his capacity to harness such opposites to his dyslexia. Neither a "disability" nor a "handicap," "it's a creative process of letting the things that are unwelcome to intrude." His jewelry reflects the mutual intrusion of music and imagery.

Nahabetian trained as a bass player (he was undecided for a time whether to commit to music or visual art), and for him music easily "cancels out the world," bringing to his mind memories, images, and sensations of volume. Though he insists that he does not experience true synaesthesia,[3] his melding of hearing and vision reflects a Western tradition: as music scholar Richard Leppert notes, "a virtual homology existed between these two senses" such that, "at the most fundamental levels of human perception, the sound *is* the sight, and the sight *is* the sound."[4] The "Time Signature" brooch series explore this bond.

Graphic similarities between a grid, a musical score, and the use of equally-spaced marks to represent rhythm offer Nahabetian rich material "to create a beat in the mesh, something that can be visually felt." His *Harmonic Resonance* (1997) brooch is a glittering oscilloscope, the mesh displaced to represent overlapping sound waves. *Finale Chord* (1997) illustrates the three-note chord

The grid unveils its possibilities and comes to life, inviting the viewer's entanglement in the points of connection between lines and planes, the pulse of curved surfaces.



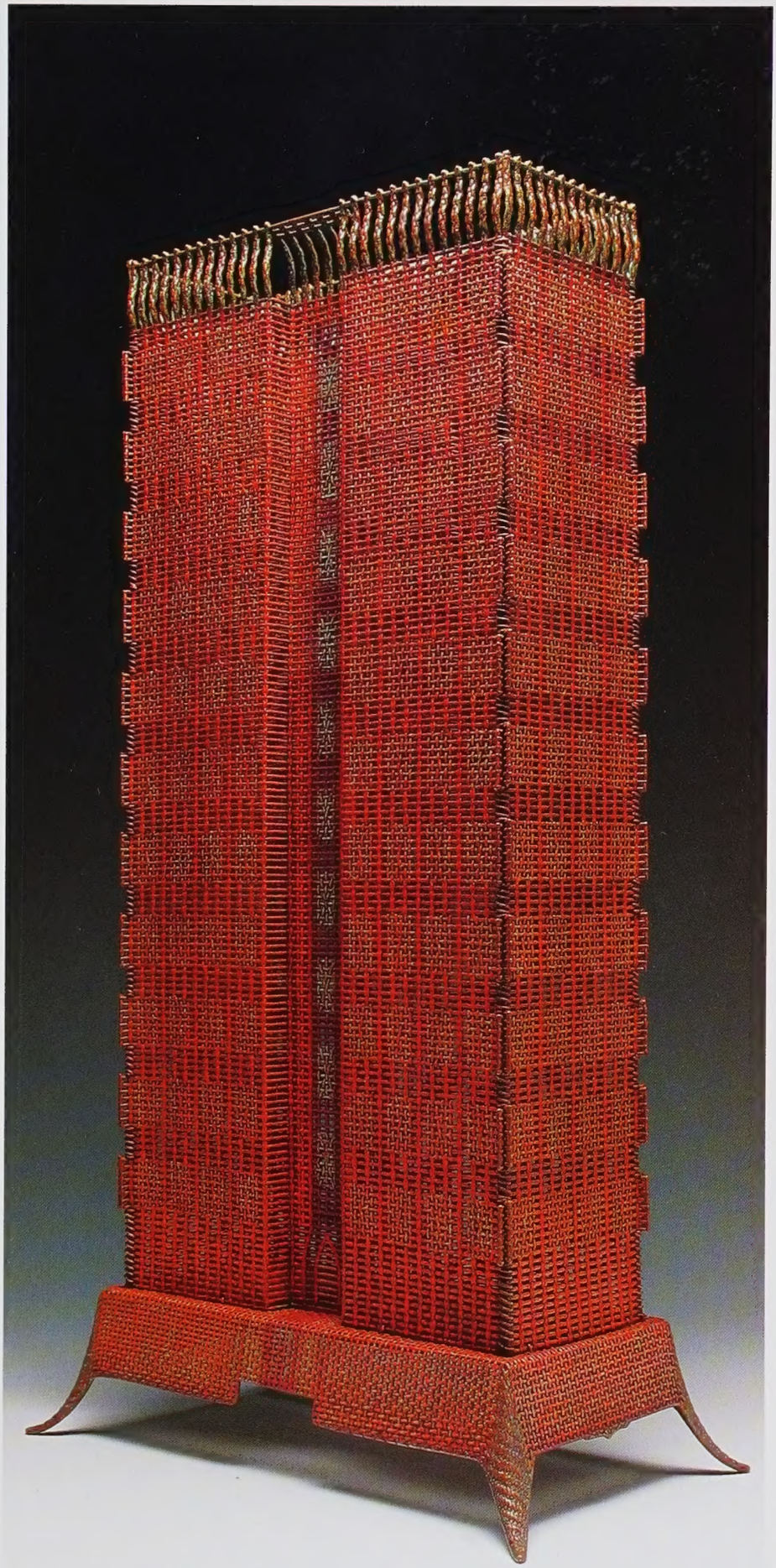
Vessel #68, 2004
6 x 7 x 3 3/4"
copper, bronze, patina with polychrome

traditionally used to bring a symphony to a resounding end. The brooch forms also convert sound into sight. The wave-like edges of *Harmonic Resonance* depict the languid tracing made by the conductor's baton when conducting a sweet, flowing piece. Nahabetian names the form, "legato," borrowing the term composers use to specify that musical mood. The "pesante" edge of *Finale Chord* reflects the "hacking and chopping" motion that cues the orchestra to play with "bite and bold attitude."

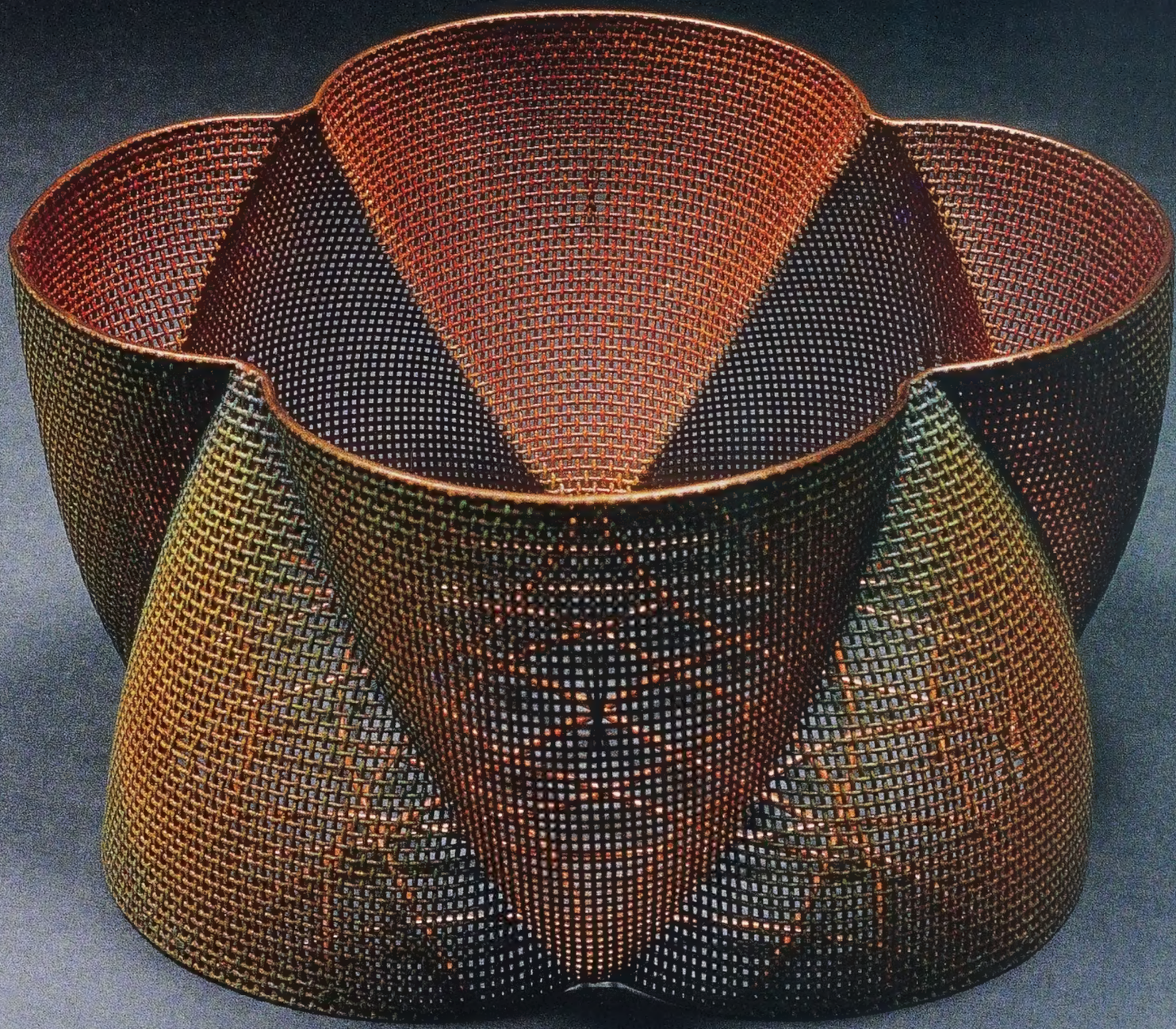
Nahabetian underscores the gestural reference by providing a gold "baton" brooch stem, but all his work has a kinesthetic component. His bracelet forms—"rondo," "gavotte," or "minuet"—sketch dancers' patterned movements. Such references reflect the artist's own tactile and kinesthetic connection to the mesh which, when pristine, is mere potential, invisible, cold, and lifeless—even in its perfection. When Nahabetian "massages the mesh," the distortions and marks make it visible. The grid unveils its possibilities and comes to life, inviting the viewer's entanglement in the points of connection between lines and planes, the pulse of curved surfaces. These relationships are particularly resonant in his vessels.

Nahabetian shares the ceramist's fascination with membranes that bring interior and exterior spaces into relation. (*Vessel #68* from 2004 is one of a series inspired by Hans Coper.) He opens the grid so the vessel may "breathe" and take on an airiness that contrasts with its mass-like form, creating dramatic effects in his architecturally-inspired vessels. *Vessel #63 (Empire State)* (2003) reconfigures a massive skyscraper. Even scaled to an intimate form the tower carries the eye upward. The open, breathing structure underscores another urban illusion: a skyscraper seems itself to rise in defiance of its materiality.

Eight-Lobed Object (2002) demonstrates deeper nuances of breath. The form bellows outward, indicating active inhalation as well as passive openness to air movement. Nahabetian describes his vessels are beings, aware but "not trying to explain anything. They simply are." Elegant lines define a vessel's form and simplicity of being—its character



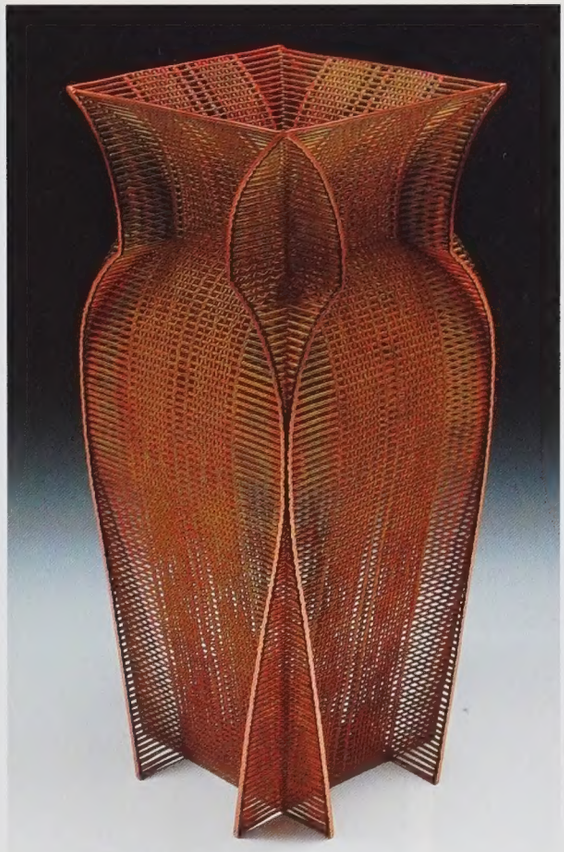
Vessel #63 (Empire State), 2003
copper, bronze, 22k gold, patina with polychrome
14 x 8 x 3 1/2"



Eight Lobed Object, 2002
copper, bronze, patina with polychrome
3 1/2 x 6 1/2 x 6 1/2"

partly shaped by the point where it catches its breath. *Eight-Lobed Object* is a squat body stretched wide with breath, while *Vessel #61* (2003) soars and captures air high in its chest. The contours of a Grecian urn show through *Vessel #61*'s airy structure; *Vessel #59* (2003) gestures to a Roycroft urn, itself an interpretation of a Moorish form.

Nahabetian recognizes the irony of layering interpretations—a burden imposed by contemporary art, which struggles to find a truly new idea. The Romantics recognized this dilemma near the turn of the nineteenth century and defined irony as a modern aesthetic state—the self-aware mind hovering between multiple, sometimes conflicting interpretations of a situation. Airy and translucent, Nahabetian's structures possess this hovering quality, and he wants them to seduce viewers to reconsider the very nature of



Vessel #61, 2003
copper, bronze, patina
7 7/8 x 3 1/4 x 3 1/4"

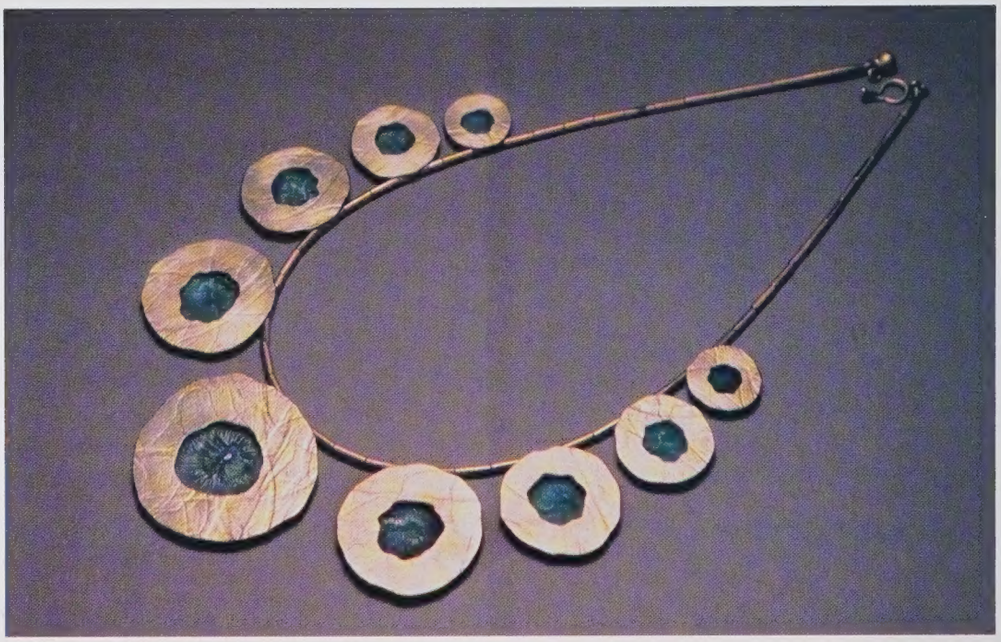
Vessel # 59 (Roycroft), 2003
copper, bronze, patina with polychrome
5 x 3 x 3"

Strict geometry can dissolve into sensual abandon; organic bodies can be massaged into forms so ethereal they let light pass through.

boundaries. Strict geometry can dissolve into sensual abandon; organic bodies can be massaged into forms so ethereal they let light pass through. In these open spaces, we see the convergence of contemporary and conventional forms, a fluidity between traditional associations of metals, fiber, ceramics, and even architecture. Each open space is a vessel ready to receive the interpretations and emotions we project. ✠

Tacey A. Rosolowski is a freelance writer who lives in Buffalo, New York.

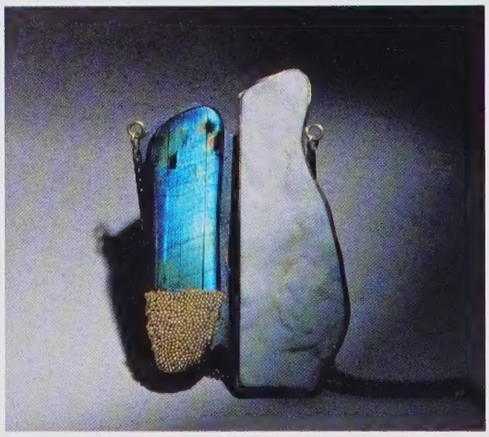
1 All quotations are taken from interviews conducted with the artist between November 2004 and January 2005.
2 The term is associated with Buckminster Fuller's organically engineered forms, but it originated with Isaac Newton.
3 'Syn' and 'aesthesia,' or perceiving together, refers to a crossing of perceptual systems. Synaesthetes may spontaneously hear tones when seeing color or see sound represented in mental images; more rarely images or sounds invoke flavors or textures. Such sensory convergences are an important part of Western aesthetics. In the third century B.C., Plato offers one of the first accounts in Book X of the *Republic*.
4 Richard Leppert, *The Sight of Sound: Music, Representation, and the History of the Body* (Los Angeles: University of California Press, 1993), xix-xx.



"HAROLD O'CONNOR: WABI-SABI"

PATINA GALLERY, SANTA FE
OCTOBER 29-NOVEMBER 30, 2004

by ELLEN BERKOVITCH



Harold O'Connor's work is often called Zen as a synonym for austere. Yet this suggestion of simplicity is misleading—the individual jewelry pieces are elaborately worked, though carefully finished to avoid any impression of material surfeit. They express a close aesthetic of pattern and workmanship that perhaps owes as much to areas of Italian virtuosity—reticulation, granulation—as to Japanese garden plans wherein long, flat spans punctuated by peaking forms refer in miniature to nature's volumes.

One's first impression on looking over four cases that housed roughly 10 pieces of jewelry each was of a spare yet striking presentation. It underscored the array's resemblance to maps or other aerial topography. The jeweler clearly prefers brooches and pendants; these made up about two-thirds of the work in the show. Yet where he becomes virtuosic in necklaces or dangle earrings, he is not answering market forces so much as giving play to an essay form instead of a koan.

A pendant juxtaposing broken planes of marble and spectrolite, for instance, isn't just analogous to what happens in geology when rock schisms reveal earth's magma and minerals such as spectrolite (a trade term for labradorite feldstar uncovered in Finland during World War II). The pendant also forms an homage to edifice and the illusionistic effects of spectrolite's holographic-type surface. Spectrolite on first glance can appear opaque black, brown, green or blue, but the slightest tilt imparts an entirely different impression. Its striations clearly recall the rock vein. Its elaborate surface texture, seemingly flat at first, reveals architectonic characteristics that evolve with light and motion. Green turns brown, blue moves into umber, and a shot of violent turquoise suggests sky breaking through clouds.

In view of the significant energies at work in the very small spaces of the jewelry, O'Connor's work seeks to articulate containment for chaotic trends that could as easily go haywire as be framed. O'Connor, who lives and works in Salida, Colorado, clearly understands the west's favorite axiom: if you don't like the weather, wait five minutes. The jewelry therefore plays a framing role, as micro-proscenium. For a series of pendants, O'Connor used a three-sided frame as a kind of edge-band between which sections of metal sheet undulate and wrap the pendant edge without fully concealing it. This interval phenomenon of lines cut by fractal geometries plays out in half a dozen brooches in which the sheet hews under or around the framing metal like a luffing sail.

Passages get expressed in parts of unified pieces as well. An 18k necklace made up of half-dollar sized flat circlets hanging off a chain—each one nesting a dollop of shirred sheet inside—speaks to clockfaces that can be seen face-up or inverted by the wearer. Emphasizing bright yellow-gold against oxidized sterling, he teases up a granulated mini volcano that also reads like cell pattern. He frequently marries grains of silver and gold for the mixed-media, rough-smooth (Wabi-Sabi) effect. You can read these granulation areas naturally, if you wish, as a cross-section of a waterfall or map of the Americas or operatic butterflies, but perhaps all such associations say is that we mortals can't help but see pattern as form.

For of course granulation effects pattern. And for O'Connor, pattern is Braille, a visual language that is at once animist but also episodic—you can't absorb it in one viewing. You have to be in a body wearing the jewelry to experience the asymmetry and hollow of a bone brooch nesting against a spot on the collarbone where human form mimes interplay between negative space and protuberance.

Tensions give O'Connor's work a certain plangency that may be an effect of their earthbound yet philosophical investigations. A tiny, jutting moonstone spells tower above mountain. Impressions of thumbprints inside pendants juxtapose with the machine-evoking forms of pleat in bundled rods. Quasi-reptilian patterns contradict a clean smoothness so seemingly unchafeable you might be, as the jeweler perhaps feels he is, the first to enter a cave with a headlamp.

That this show manages to be deeply moving while also so palpably material speaks ultimately to the paradox that the road to simplicity is paved with high sophistication.

Ellen Berkovitch is a writer based in Santa Fe.

clockwise from top
Necklace, 2004
18k gold, sterling silver
length 20"

Pendant, 2004
18k gold, silver, marble, spectrolite
2 x 2 1/2"

Brooch, 2004
18k gold, sterling silver
1 3/4 x 2"

"J. FRED WOELL: 70 AT 70"

ELAN FINE ARTS, ROCKLAND, MAINE
AUGUST 18-OCTOBER 9, 2004

by J.E. PATERAK

"Sculptor," "jeweler," "artist,"—cumbersome titles when viewing a retrospective of the work of J. Fred Woell. The exhibition "70 at 70" at Elan Fine Arts in Rockland, Maine actually presented 87 works spanning nearly 40 years by a considerable figure in our field.

The gallery itself generates an almost church-like sense of space. Some of this is due to the light-filled, lofty peaks of what was once a New England barn. But after a moment it becomes evident that this feeling has been evoked by Woell himself. *Things Go Better with Coke* hangs high on one side of the gallery—this wall assemblage, which takes the intentional shape of a cruciform, is poignantly punctuated by its careful placement. The resplendent irony that cloaks much of Woell's work is embodied in this piece, which plays pop culture against religious iconography.

Woell is a master of assemblage, courting serendipity as if life itself depended upon it. The most recent of the larger wall assemblages depict work that is "mature" in that all the information Woell has absorbed over the years as teacher and student now effortlessly finds its way into a singular voice. *Play It Again Sam* utilizes the red and white stripes of a flag, keys and hammers from the workings of a piano, an old coffee can label, newsprint, and parts of a broken record acting as wings and giving flight to the piece. The formal beauty is considerable and the many layers of objects allow for meaning that is both personal and universal. In many of these later works, homage is paid to early twentieth-century European artists such as Klee and Schwitters, as well as American artists such as Johns, Rauschenberg, and, to a lesser degree, Warhol. In some works, such as *The Man who Knew too Much*, references are also made to "Outsider" and African sensibilities. Devices such as a paintbrush centered on top of a piece personify the object, while the frequent use of a reflective circle (a CD, polished top of a can, or a mirror fragment) pulls the viewer into the artwork. Evidence of academia is residual and inescapable.

Breaking off the wall, three bodies of work reflect Woell's sculpture background. Rarely seen are five bronzes dating from 1968-1970. These works were likely chosen because they foreshadow elements and techniques that were later embraced by Woell. In *The Egg and I* we see Woell's early impulse to put himself into the piece, using the sheriff's badge as a stand-in. In *Those Magnificent Men in Flying Machines*, Woell begins his exploration of embossing objects, toys, or plastic throw-away items, often molding key words or slogans in wax and then casting them. This love for casting carried over to jewelry, which is represented here by numerous pieces, including more recent works made of PMC.

A grouping of small, tabletop bronze cast objects is presented together on one rectangular pedestal. There are two music boxes created in 1984, *The Boy Scout Gets Old* and *Requiem for a Lukewarm Lover*; in one the music cylinder is out of tune, and plays music like that in a nightmare or late night movie. In the others, mostly created in the early 1970s, Woell's sarcastic humor is manifest in both the title and form, such as *Population Explosion*, where babies are popping out of a soldier's head. Most of these sculptures are toy soldiers that have been altered and then cast. Some appear Shiva-like from across the room, only to have a new light cast on them upon close observation.

In *Stop the War I Want to Get Married*, a bride and groom figurine dreamily spew from the tip of a rifle. The soldier imagery offers new significance today as the current war in Iraq reminds us of Vietnam, and the consequences of war, as Woell intended. Just as *Art is a Play*, from 1998, reflects a sensibility incurred in 1968's *Things Go Better with Coke*, he is able to bend time as his thoughts from nearly a half-century ago bear continual reflection. We are fortunate that Woell's questioning and ironic wit are still actively pushing his viewers to address both the beauty and the cruel irony of life.

J.E. Paterak, a jeweler and occasional writer, has her studio/gallery in Portland, Maine.

clockwise from top left
Stop the War, I Want to Get Married, 1975
bronze, box
3 1/2 x 2 1/2 x 2 1/2"

Play it Again Sam, 2002
mixed media
25 x 25 x 4"

Things Go Better with Coke, 1968
mixed media
39 x 9 x 5"
Photo: Jim Fossett

"TAKUMINAQTUT: LOOKING AT THE BEAUTIFUL"

HARBOURFRONT CENTRE, TORONTO
AUGUST 18–SEPTEMBER 19, 2004

by NIKI KAVAKONIS

As a part of Planet IndigenUS, an international celebration of native culture, Harbourfront Centre hosted an exhibition of metal work from the permanent collection of Nunavut Arctic College (NAC). Located in Iqaluit, Baffin Island, on the 64th parallel, NAC is the mecca for fine art and craft, including metalwork, in the Canadian arctic. Although jewelry courses were taught previously by Orland Larson, Helga Palko, and Jim Robson, it wasn't until 1989 that the Fine Arts and Crafts Program was established at the college, which has a student body composed of 99% Inuit adults, many already artists in their own right.

Attended by adult students who express their own highly developed visual language and who are firmly entrenched in their culture, NAC has among its artists many that are prolific in another medium. Most Inuit artists are proficient in carving (local materials such as soapstone, ivory, muskox antler, and caribou antler abound) and printmaking. Okpik Pitseolak, Pootoogook Qiatsuk, Elsie Klengenburg, and William Noah are a few of the participants who are internationally renowned.

"Takuminaqtut: Looking at the Beautiful," curated by NAC Senior Instructor Beth M. Biggs, displays 135 pieces, comprising nearly half of the college's permanent collection. It is representative of a strong material and cultural tradition. As artist-in-residence Mathew Nuqingaq explained, the Inuit oral tradition remains a vital one, and the legends of that culture are still passed from generation to generation.

Indeed, it is the legends that prefigure the majority of the Inuit iconography. In Chris Aula's *Sedna Container,* the figure of Sedna, carved from walrus ivory, raises a spear above her head in a gesture of triumph and strength. A protector of hunters, she lives deep in the sea and is keeper of the sea mammals on which the Inuit hunt and survive. Scenes of bountiful hunting practices are chased on the side of the sterling jar itself.

The Inuit artists exhibited reveal a sense of humor about themselves, and the world around them. Daniel Komoartok's sterling silver teakettle, *Animals Igloo Teapot*, echoes the sophisticated form of a Michael Graves kettle, through native eyes. The bulbous vessel here represents the form of an igloo and has a bird-like handle of muskox antler, complete with a garnet eye. From the top of the igloo emerges a soapstone walrus head, forming the lid's handle. Frank Audla's *Polar Bear Sculpture* is far more intimate in his view. Done in almost pure relief, the bottom and tail of a bear face the viewer. With its head coyly glancing back, and its front paw curled slightly, it creates an amusing and affectionate portrait of this local inhabitant.

Some Inuit artists share a minimalist aesthetic. Nuqingaq's 1996 *Mother and Child* brooch has been reduced to almost pure line. Ruben Komangapik is even more reductive—his oxidized black sterling silver *Hollow Form Hinged Bracelet* (1996), studded with pearls, belies any native cultural influence at all.

It is only within the last 50 years or so that the traditional nomadic Inuit lifestyle has seen significant changes. Many of the artists represented were born in igloos and caribou tents, and lived off the land and seas by hunting. These experiences are still within living memory, and the concept of residing in a fixed home or going to college remains very new to them.

Beth Biggs acknowledges the important role of local tradition in the exhibited artists' works. In her curatorial statement, she summarizes: "The work demonstrates these artists' desire to make permanent the stories of their elders, the images of their land and their culture... Through their work, these artists share their lives with us, giving a small glimmer of the vastness of their experience."

Niki Kavakonis is a practicing jeweler and designer, and current president of the Metal Arts Guild of Canada.

clockwise from top
Chris Aula
Sedna Container, 2003
sterling silver, ivory
3 3/4 x 2 x 2"

Ross Kayotak
Goblet, 2000
sterling silver, ivory
4 1/8 x 8"

Clifford Natakok
Bear Container, 2003
sterling silver, ivory
3 3/4 x 2 1/8 x 1 3/4"
Enoosik Ottokie
Goose Container, 2003
sterling silver, baleen, bone
3 3/4 x 2 1/8 x 1 3/4"
Kavavou Pee
Aiviq (Walrus) Container, 2003
sterling silver, ivory
2 3/4 x 1 1/2 x 1 1/2"

Daniel Komoartok
Animals Igloo Teapot, 2000
sterling silver, muskox horn, soapstone, garnet, ivory
6 1/8 x 5 x 4 3/4"

"EPICENTER CCA"

TACOAH BRUCE GALLERY, CALIFORNIA COLLEGE OF THE ARTS, OAKLAND
NOVEMBER 3-18, 2004

by JENNIFER CROSS GANS

Any exhibition by a major school evokes expectations beyond an art or craft gallery show. Not only should the work be fine in its own right, but it must also showcase the students' education and burnish the reputation of the college and faculty. "Epicenter CCA," an exhibition held in conjunction with the New York University conference "Forging Modernities: California Metals in Context," also illustrated some of the 96-year-old school's contributions to Californian and U.S. metal arts.

California College of the Arts changed its name in 2003, dropping the "Crafts" to better reflect its current mission, which is to teach art. While teaching the basics of most metals techniques, the school clearly encourages students to focus on diversity and the pursuit of their personal artistic vision. It does so along fairly classical lines, mostly using traditional materials, resulting in work that is expressive rather than avant-garde, and well-crafted, varied, and imaginative.

The show's most impressive achievement was an almost seamless transition from undergraduate and graduate students to alumni and faculty. Whitney Couch contributed two tours de force sculptures done in her senior year; one of grape goblets, and another of an incredibly lifelike potato plant, both nestling in a writhing mass of stems and leaves. While the works were reminiscent of those of teacher Curtis Arima, both artists acknowledged the influence but agreed the end result was just artistic minds on a similar track. Amy O'Connell used the prismacolor technique taught by Marilyn Da Silva to decorate a painterly still life in colored copper consisting of a bottle, apple, grapes, wineglass, tray, and cloth.

Many of the undergraduate pieces were imaginative mini-sculptures with a powerful story. Canute Sweeney contributed an *Alchemist Scepter*, and a book *A Poet's Dream* with a finely chased and repousséd classical face on its cover. Jessica Benzaquen showed *Phoenix*, a mutilated winged victory rising from a platform of tiny guns. Most of the wearable jewelry also had strong messages ranging from fantasy to social commentary. Bonnie Heras's *Protection* ring straddled four fingers, and was crafted from silver and bobcat claws, while Kathleen Bostick offered an architectural *Currency Ring* in sterling, Russian rubles, and fine silver coins.

Faculty work included two pieces by the consummate storyteller (and program chair) Marilyn Da Silva, with a playful silver and enamel paint teapot titled *Rock, Paper, Scissors*. Her table sculpture *The Invisible Me* represented the artist's experience with identity theft, showing a thieving mockingbird perched on a book, furtively deciding how to pick its antique locks. Jack Da Silva's pieces displayed his classical raising skills, now increasingly supplemented by a thoughtful, whimsical imagination, resulting, for example, in *The Greatest of These: Drawn to Believe*, a silver teapot budding with corks and pencils. Susan Wood, best known for her weaving and chain-making, branched out into three thought-provoking silver mini-sculptures showing the choices and casualties of human love. Both Curtis Arima and Deborah Lozier also explored new and expansive directions with eye-catching, bigger scale work in enamel and steel.

Alumni and emeritus work was represented by a virtual honor roll of metal artists, from Bob Winston, Victor Ries, and Margaret de Patta to Alan Revere, Collette, D.X. Ross, and Harriete Estel Berman. The exhibition curators focused on the work of two emeritus professors, Marty Streich, who contributed several 1950s- to 1970s-era pieces and cartoon-like sketches, and Florence Resnikoff, offering her signature anodyzed and electroformed titanium, niobium, copper, and silver. The show also highlighted four massive, wrought steel and brass sculptures done by the late, distinguished alumnus Carl Jennings.

Schools with flourishing metal arts departments are not exactly an endangered species, but can and do crash and burn, like the recently defunct program at San Francisco State University. Shows like "Epicenter CCA" play a major part in keeping the work of art schools fresh in the eyes of educators, art lovers, and the general public, and helping to ensure their place as leaders in metal arts teaching in the twenty-first century.

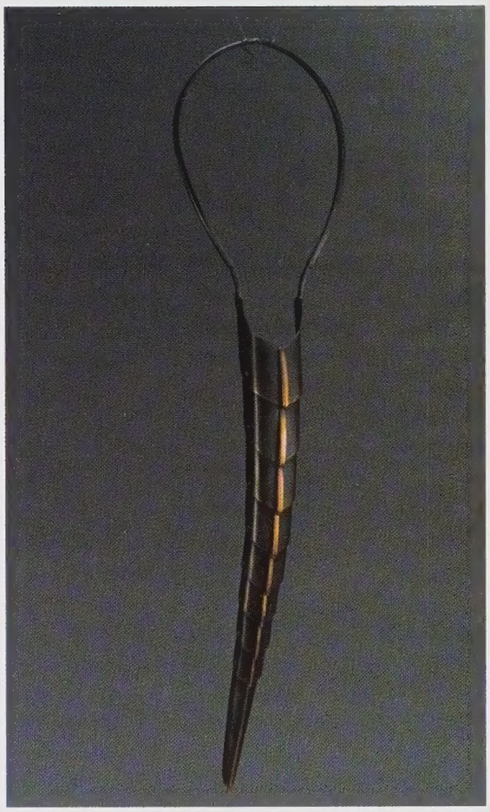
Jennifer Cross Gans is a writer and studio jeweler in San Francisco.

clockwise from top left
Marilyn Da Silva
Rock, Paper, Scissors (teapot), 2003
sterling, enamel paint
6 x 9 x 5"
Photo: M. Lee Fatherree

Jack Da Silva
The Greatest of These: Drawn to Believe (teapot), 2003
sterling, lumber pencils, stainless steel, nylon, cork, glasshead quilter's pins
8 x 2 x 6"
Photo: M. Lee Fatherree

Susan Wood
Love/Fear, 2003
sterling, copper, brass, Plexiglas
7 x 2 1/2 x 2 1/2"

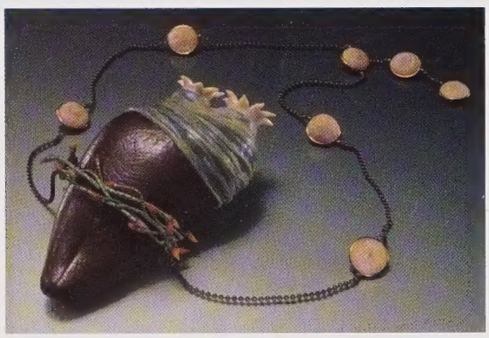
Whitney Couch
Grape Goblets, 2004
fine silver, copper, patina
12 x 36 x 24"



"HAMMER AND HAND: CONTEMPORARY AMERICAN METAL"

CENTER ART GALLERY, CALVIN COLLEGE, GRAND RAPIDS, MICHIGAN
AUGUST 23-SEPTEMBER 25, 2004

by PHILLIP CARRIZZI



The recent exhibition "Hammer and Hand" sought to highlight "some of the best work being produced in contemporary American metal today." It brought a sampling of techniques, materials, and functional/afunctional constructs into a city where there are few opportunities to view metal arts beyond fine jewelry, and even fewer thriving studio practitioners.

Anna Fariello curated this collection of works from 25 artists exhibited in an intimate, one-room gallery. "More than being about use, the work of today's smiths is about metal," states Fariello, who seems to reject the idea of metalsmiths as innovative in terms of context and use, and instead views the field as collectively manipulating form. "What can metal do? How can it be shaped?" she asks, asserting that contemporary metalsmiths "add expressive qualities to functional work, creating hybrid forms."

Yet this was not the work of blacksmiths, or even of objects that were primarily hammer formed. And only a simple majority of the work started from functional forms (mainly vessels), making it hard to imagine that the "hybrid form" idea was really the curatorial underpinning. In fact, when talking about the show with students and colleagues during and after the opening, not a single person could identify the expressed vision or theme, even with a poster-sized curatorial statement hanging above our heads. Instead, the show read like a miscellany of current work chosen using an unspecified preference as the main criteria. Yet the exhibition included outstanding examples of concept, design, material consideration and craftspersonship.

Joe Muench's *Ceremonial Guard for an Unbearded Metalsmith* strikes just the right blend of humor, dynamic form, and refined craft. Even simply hung from a beige gallery wall, the necklace is a singular object—an articulating modular taper that is at once substantially constructed and light enough to look like it could crawl off the wall on its own.

Tara Stephenson consistently produces the most poignant work in our field; heady but parsable. Her *Bulemia Bracelet* is no exception. Thoughtful, bold, and expertly constructed, even after 10 years of being widely shown, this work remains an emblem of the contemporary balance required of metalsmiths—to capture ideas in dramatic sculptural forms while maintaining the technical competence of the silver or goldsmith.

In her *Untitled Vessel*, Lin Stanionis produced the most visceral work in the show. It intentionally belies or obscures the method of production, uses uncommon materials for jewelry, and, but for its unfortunate horizontal presentation in the corner of the gallery, would probably serve as the modern jewel of the show.

Vessels by Rachele Battreall, Susan Ewing, Sharon Massey, Kathryn Osgood, and Anne Hallam, and a folding knife by John Jensen probably come the closest to the curator's vision of adding "expressive qualities to functional work." Using lively design motifs, they have embellished traditional cup, container, and cutting and serving forms to the point where their only usefulness is as sculpture.

Much of the jewelry and other objects are more difficult to understand in the context of the exhibition. Jean Mandeberg's two-dimensional, tin-paneled, thumbtack-laden, wall-hung composition does not represent "some of the best work being produced in contemporary American metal today." And Colin McDonald's *Transition Brooch* comes nowhere near the expressive functionality suggested in Fariello's statement.

When measured by the quality and consistency of shows with national calls for entries, "Hammer and Hand" comes up a little short. But on the strength of individual works comprising nearly half the show, this exhibition was a unique opportunity for the students and artists in Grand Rapids to encounter some world-class objects created in metal. And it will probably serve as something of a catalyst to bring more metals and crafts into what is now a fairly practical, and two-dimensional marketplace.

Phillip Carrizzi is an artist and the chair of the Allesee Metals/Jewelry Design Program at Kendall College of Art and Design in Grand Rapids, Michigan.

clockwise from top

Joe Muench
Ceremonial Guard for an Unbearded Metalsmith, 2002
steel, brass
22 x 6 x 2"

Rachele Battreall
147 Leaves, 2002
sterling silver, bronze
3 x 5 x 5"

Kathryn Osgood
Tea Set, 2003
sterling silver
teapot 6 x 6 x 6"

Lin Stanionis
Untitled Vessel, 1996
bronze, sterling, polymer clay, wax
18 x 5 x 3 1/2"

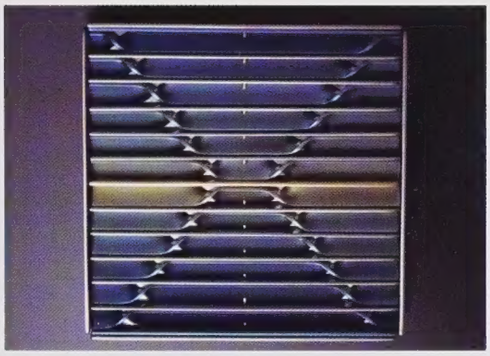
"LOOKING: OVER MY SHOULDER"

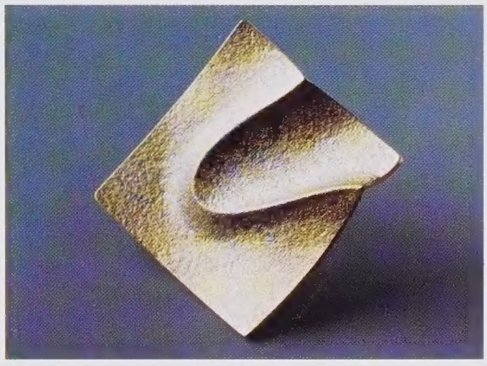
LESLEY CRAZE GALLERY, CLERKENWELL, LONDON
SEPTEMBER 24–OCTOBER 30, 2004

by DEIRDRE O'DAY

To mark the twentieth anniversary of her gallery, Lesley Craze invited 177 jewelry artists and silversmiths from Australia, Britain, France, Germany, Hungary, Ireland, Japan, The Netherlands, and the United States to contribute to a celebratory exhibition. The result is a fair summation of the heterogeneous nature of the contemporary jewelry scene. With works ranging from classic examples by such British pioneers of modern jewelry as Gerda Flöckinger, Jacqueline Mina, and Wendy Ramshaw, to that of recent graduates, one is able to discern the commonalities and identify national differences, recurring themes, and new departures. Also evident is the predominance of women makers—roughly two thirds in this group—in professions that were traditionally the province of male makers.

This exhibition makes clear how large, fertile, and diverse the jewelry discipline has become in a matter of decades, and how the field is peopled with adventurous talents who venture beyond the centuries-old codes and language of body adornment. These metalsmiths look to fellow visual artists and to philosophy, politics, feminism, history and science for reference and inspiration. They reject orthodoxies of materials and techniques, and value a piece of jewelry as an object to be admired and enjoyed off the body





as well as on it, rather than as an intrinsically precious possession that must be locked away in a box. The catalogue of non-precious and unorthodox everyday materials, and the often witty approaches to them, grows exponentially, and was well represented here, reflecting the questing energy and inventiveness characteristic of young makers today. Faced with such a tour de force amassed in one place, it is impossible to do more than attempt to highlight salient features.

Japanese design and craftsmanship, rooted in ancient traditions and admired for its sophistication and restraint and the adroit application of traditional techniques, is a commanding presence. Tomiko Itokawa uses the *Kumihomo* braiding technique for the black silk chain of his virtuoso necklace, adding a pendant of *shakudo*, the copper/gold alloy whose chased metal surface is treated with the coloring agent *rokusho* and copper sulphate. *Kanshitsu*, an indigenous natural lacquer, brings to Kyoko Fukuchi's plump crimson wooden bangle an intense color and high sheen. A different traditional source, the brocade costumes of *Noh* theatre, inspired Reiko Ichimura's *Itonishi* abstract brooch of matted gold.

Though from a different cultural milieu, Dutch jeweler Ralph Bakker seems philosophically at one with the Japanese. His own inspirations, he states, are "the material, the symbolism of a traditional shape, or the beauty of a technique," and he encapsulates these words with a necklace of extraordinary beauty, intricate construction, and peerless craftsmanship. Linkchains and circles, repeated, overlapping—"form and function intertwined"—fascinate him, and they are the basis of this design. Bakker also believes that "without the great past no present is possible," which would serve as a fitting aphorism for Gun Thor's silver and stainless steel choker—a rhythmic sequence of identical sculptural units whose title, *Attica*, directs our imaginations toward ancient Greece. Similarly, though perhaps unintentionally, it is possible to see a classical Roman precursor in Willem Honing's small and deceptively modest gold bracelet. And Liliane Busch's neckpiece triggers thoughts of a golden Greek diadem just retrieved from the soil, still bearing traces of its filigree surface decoration.

The inspiration for Brenda Ridgewell's silver and stainless steel construction, whirling and fanning out in fine multiple lines encircling the neck, was a scientific concept—the "interstitial space" between atoms and ions in a crystal lattice—of which it is a visual metaphor. And a tightly controlled, rectangular brooch by Joel Degen explores and exploits the reflective and refractive properties of titanium, stainless steel, and gold. Nature is "nurtured" in Felicity Peters's ring, a piece of lapis lazuli cradled in a sliver of gold, and is botanically embodied in Jane Adam's *Purple Flower* brooch of anodized aluminum, silver, stainless steel, and gold—its fragile, attenuated petals seem to open slowly as we watch.

Other concepts concerning the nature of jewelry, formal subtleties that defy accepted conventions of size and shape and of spatial relationships to the body, are exemplified by such pieces as David Poston's bangle, a five-inch long tubular sleeve of woven stainless steel, glinting with infinitesimal touches of gold; Sonia Cheadle's elegant waisted platinum and diamond cuff; and Susan May's five sinuous interlocking loops of silver projecting upwards and outwards into the space around the arm. Kate Powell merges jewelry and costume with a romantic ruched and embroidered white silk dupion *Neckpiece* evoking the tall, neck-hugging collars of the late nineteenth century. Two American makers, Jan Mandell and Flora Book, show adaptable or "transformable" pieces, respectively a gold wire necklace and pendant with green jasper discs, which divides into components and can be repositioned in various ways, and a pair of beautifully understated silver and black beaded cuffs in geometric neo-Deco design which double as a choker.

The silver constituent of the show is heavily overshadowed quantitatively, but there are some notable contributions, especially from Shannon Gomez, Chris Mullins and Leslie Matthews.

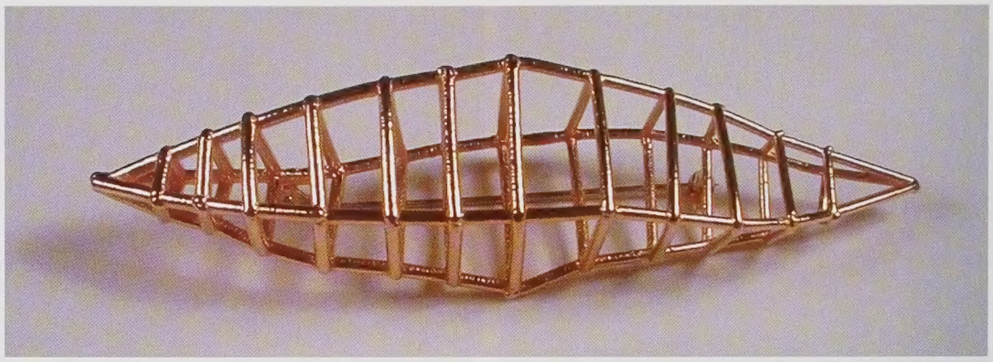
Deirdre O'Day, a former curator of jewelry at the Victoria & Albert museum, is a writer on jewelry and fine and decorative arts and a BBC researcher.

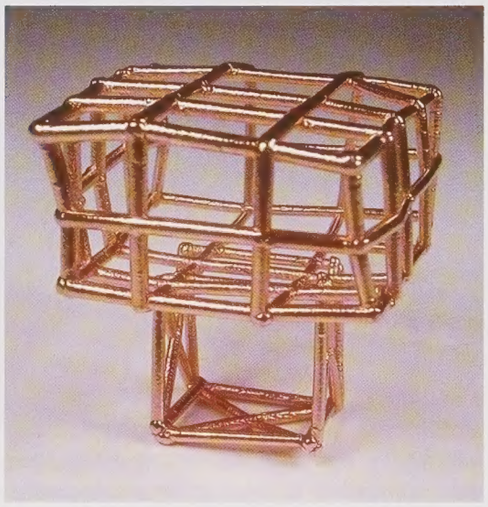
clockwise from top
Ralph Bakker
Over My Shoulder (necklace), 2004
gold, enamel, silver
6 1/4 x 8 5/8 x 1 3/4"

Joel Degen
Reflections & Refractions (brooch), 2004
anodized titanium, stainless steel, 18k yellow gold
2 x 2 x 2 3/8"

Jacqueline Mina
Brooch, 2004
18k gold, platinum fusion inlay
1 3/4 x 1 3/4"

Tomiko Itokawa
Pendant, 2004
18k gold, shakudo, silk
length 18 7/8"





"CHARLES LEWTON-BRAIN: THE CAGE SERIES"

FLEURY GALLERY, HOUSTON, TEXAS
SEPTEMBER 18–OCTOBER 21, 2004

by DIANE FALKENHAGEN

Like three-dimensional line drawings in gold, 79 one-of-a-kind pieces of jewelry from Charles Lewton-Brain's "Cage Series" glistened seductively for viewers of his solo show at the Fleury Gallery. The series, which the well-known Canadian artist began in late 2000, grew out of earlier cage-like masks and body art. The exhibition marked the first U.S. showing of this group; it included brooches, bracelets, rings, earrings, pendants, and a lone, fold-formed vessel.

The mostly sculptural, grid-like structures of the "Cage Series" enclose and define space with small-gauge stainless steel wires that were fusion-welded together, then heavily electroformed—first with copper, then with 24k gold. Many of these fabricated jewelry forms resemble man-made metal objects that have been submerged and altered by the natural growth processes of the ocean. The work recalls images of sunken artifacts sheathed with layers of microscopic animal and mineral deposits: encrusted wire mesh, steel cables, and collapsing iron frameworks that long ago surrendered their practical, above-water existence to a new purpose undersea. In fact, the technical process of electrodeposition has many parallels to the phenomenon of salt-water accretion.

Lewton-Brain maintains rigorous laboratory-like control over his "grown" surfaces by selective placement of the object in the acid electroforming bath, where it stays for days on end. Barrel tumbling the pieces between the two electroforming steps work-hardens the materials and reinforces the rigidity that is already inherent in the well-engineered structures. Finally, after heavily electroforming 24k gold over the intermediate layer of grainy copper, a shimmering finish is achieved by tumbling the pieces again with steel shot. The result is a highly burnished nodular surface that elevates the recognizable electroformed texture to a higher, yet still comfortable, level of sophistication.

Many of the pieces in the show incorporate natural stones or gem beads that are either set into bezels or strung onto the core wires of the matrix, then electroformed in place. Lewton-Brain uses the latter method repeatedly in his simple, flat rings and earrings. But it is his more complex pendants and architectonic finger rings, with gently worn beach pebbles held captive by wire frameworks, that best underscore the cage theme.

In the case of the rings, fabricated wire structures that tightly confine the pebbles within are perched on top of square frameworks, which serve a dual function—to act as ring "shanks" and to provide a stable base for the forms that stand upright on their own.

By not attempting to perfect the wire segments or their welded junctures, Lewton-Brain consciously eschews precision and self-assuredly invites the viewer to experience his process. His spontaneous approach to decision-making is most evident in the largest and most sculptural bracelets and brooches that have no stones. The result is a relaxed style and a perceived randomness. Each piece is endowed with a playful sense of plasticity regardless of its actual physical rigidity. The work also possesses a simultaneous feeling of poise and tension that perhaps can be attributed to the thoughtful relationship between the artist's desire for control and his respect for the natural will of the materials and process.

For Lewton-Brain, inspirational sources for the work are as numerous as they are varied. In addition to the obvious references to cages and coral accretion, the work is informed by drawing, especially computer-generated wireframe drawings; the Zen Buddhist philosophy of Wabi Sabi; and even West African Ibeji figures that are made of metal cast around a steel core.

In a written statement about the series, Lewton-Brain addresses one of the more esoteric ideas that form the work's conceptual basis: "exoskeletal forms as a metaphor for internal and societal structures." However, the exhibition's appeal lies not in the artist's intellectualization of his work, but in the dynamic linear forms, the material seduction of rich 24k gold, and the stimulating tactile qualities of the surfaces.

The overall scale of the work is large; some of the pieces challenge even the parameters of comfort in art jewelry. But it is refreshingly lightweight, both physically and visually. Furthermore, the work's real and perceived characteristic of lightness psychologically diminishes the wearability issues users are confronted with. Despite their cumbersome nature, the bracelets, brooches, and rings come alive when displayed on the human form. In contrast, the dark wood and glass cases of the gallery expanded the cage metaphor by literally trapping the work inside.

While the "Cage Series" is not the product of a methodical design system like the fold-forming Lewton-Brain is so acclaimed for, it is nevertheless based on a similar and successful formula: regard for materials and process + a willingness to undertake a thorough and disciplined exploration of an idea = a strong and coherent body of work.

Diane Falkenhagen is a metal artist whose studio and residence are located on West Galveston Island, Texas.

clockwise from top

Cage Pin B373, 2001
stainless steel wire, electroformed copper, heavy 24k gold electroplate
4 1/8 x 1 1/8 x 1 1/8"

Cage Ring B297, 2001
orthodontic fusion welding, copper acid electroforming, steel shot tumbling, heavy 24k gold electroplate
1 3/8 x 1 3/8 x 1 1/2"

Cage Bracelet B661, 2003
stainless steel wire, electroformed copper, heavy 24k gold electroplate
4 x 3 3/4 x 5/8"

COMMISSIONS

by Elizabeth Broadrup Lieberman

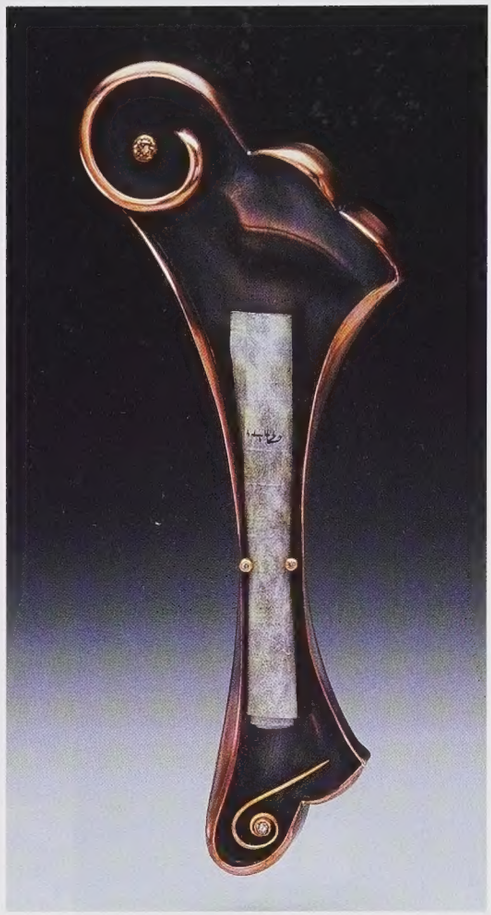
Sondra Sherman
Double Happiness, 2004

Double Happiness comprises distinctly "his" and "hers" brooches of fine silver and 18k gold accented with champagne diamonds. When fitted together, the two individual pieces become a flower in bloom. Sondra Sherman designed *Double Happiness* to be worn in tandem by Marc and Diane Grainer, a long-married couple who commissioned the jewelry. After the Grainers saw a his-and-hers pendant set (*Armor and Amor*) created by Sherman at Washington, D.C.'s Renwick Gallery, they asked the metalsmith to design a his-and-hers brooch set. "Marc Grainer said he would never wear a pendant, but he would wear a brooch," Sherman explained. Given complete freedom of design, she sought to create a form that would celebrate the couple's relationship. Inspired by her research on botanical aphrodisiacs, Sherman designed *Double Happiness* as an abstracted datura (thorn apple) plant, known for its trumpet-shaped flower. The flower created by joining the two brooches suggests a corsage, Sherman's allusion to rituals of courtship. The mixed-media presentation box she constructed to display *Double Happiness* references old-fashioned corsage boxes used by florists. When considering materials, the metalsmith chose very white fine silver for its flower-like softness and delicacy, 18k gold for color contrast and structural support, and precious champagne diamonds to subtly enrich the brooches with reflected light. The brooches' backs are as elaborately detailed as their "public" sides to honor the private, intimate relationship the Grainers share. Engineering the individual pieces to fit together and balance properly proved challenging as Sherman moved from paper model to fabrication. She used repoussé and construction techniques to fabricate the jewelry, which can be displayed as a single piece but can only be worn as dual "his" and "hers" brooches. Sherman presented *Double Happiness* to the Grainers in May 2004.

Sondra Sherman
Double Happiness, 2004
Brooch set: fine silver, 18k gold, champagne diamonds
4 1/2 x 1 3/8 "
Commissioned by Marc and Diane Grainer
Photo: Marty Doyle
For further information contact: sondrasher@aol.com

Aimee Golant
Ascendance, 2004

In Marc Benioff, metalsmith Aimee Golant found a client whose "aesthetic matches [hers] perfectly." Benioff commissioned Golant, who specializes in Judaica, to make several mezuzahs for his San Francisco home. A mezuzah (Hebrew for "door post") is a hand-lettered parchment scroll rolled and enclosed in a protective case, then affixed to interior and exterior doorways in Jewish homes. The scroll's text, taken from Deuteronomy, is the commandment to write God's words upon the door posts of houses, a reminder of divine presence. Golant's unconventional mezuzahs expose the scroll rather than encasing it, her way of sharing the "beautiful and universal" meaning of the text itself. When Benioff, chairman and CEO of Salesforce.com, converted his home's third floor into an open master bedroom suite with striking city views, he asked Golant to create a special mezuzah for an arched doorway at the foot of the staircase leading to the new suite. He envisioned a mezuzah that would reflect the staircase's curved wrought iron railing, as well as a spirit of ascendance—from sheltering doorway to open space above, from public entrance to private sanctuary. Golant designed a curvilinear copper and 22k gold frame that draws the eye upward to a focal brown diamond. She chose these materials for their "warmth, beauty, and light,"



fashioning the sacred object to reflect a life whose richness is valued in human interaction, not by conventionally "precious" possessions. The design that Golant conceived in 10 minutes took 56 studio hours to fabricate. She cut thin sheets of annealed 20-gauge copper with a hand saw and foot sheer, then used a Bonny Doon hydraulic press with a custom-cut Plexiglas die form to make a concave groove where the scroll would rest. She cut strips of copper and formed them by hand to make the frame, then fit the grooved sheet into the frame and soldered it from the back. Hammering achieved a sculptured finish. A flat sheet of copper on the back allows the mezuzah to be affixed to the doorway with high-powered magnets. Benioff can remove the mezuzah for use as a devotional object during meditation or take it with him when he travels. On its completion in March 2004, Benioff, his fianceé, and Golant hung the mezuzah in the arched doorway together, saying a prayer for the occasion.

Aimee Golant
Ascendance, 2004
copper, 22k gold, brown diamonds
8 x 3 1/2 x 7/8"
Commissioned by Marc Benioff
Photo: Hap Sakwa
For further information visit: www.aimeegolant.com

Elizabeth Broadrup Lieberman is a freelance writer living in Michigan.

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by Dana Singer

THE CENTER FOR CRAFT, CREATIVITY & DESIGN

SNAG Supports New American Studio Craft Textbook

SNAG made a donation to The Center for Craft, Creativity & Design (CCCD) to assist in their $500,000 matching grant supporting the writing and publication of the *20th-Century History of American Studio Craft* college-level textbook. This groundbreaking textbook is being written by SNAG member Bruce Metcalf and Janet Koplos, senior editor of *Art in America*. The endorsement of this project by all the major organizations in metal, glass, wood, clay, and textiles speaks volumes as the CCCD raises their major funding support from private foundations, collectors, and galleries.

Workshop on Mokume Gane a Success

With funding from SNAG's Workshop Grants Program in 2004, Georgian College, in Barrie, Ontario, Canada, produced a well-attended workshop by member Steve Midgett, who taught mokume gane techniques. The Workshop Grants Program was established in 1987 with seed funding from the National Endowment for the Arts. It provides grants to local and regional metalsmithing and jewelry groups, craft organizations, and educational institutions.

Argentium Sterling Silver and Stuller Feature SNAG Honorary Member Award

Argentium Sterling Silver has chosen the SNAG Honorary Member Award to feature on its new website. The Award is also featured in the 2005 Stuller Catalog. The Award is a micro-folded hydraulically formed sterling silver bowl, refined through traditional holloware techniques, and set on a marble base. It was designed and created by SNAG member Cynthia Eid. Eid's winning design was the unanimous choice of jurors Bernard Bernstein, Lane Coulter, and Mary Ann Scherr in SNAG's 2002 design competition to create an award to present to all future recipients of the Honorary Member Award.

Metalsmith Editor Lectures at Bard Graduate Center

Metalsmith editor Suzanne Ramljak lectured at New York City's Bard Graduate Center for Studies in the Decorative Arts, Design, and Culture in April, on "Protective Ornament: Dressed for Defense." Ramljak, an art historian, curator, and author, discussed her article of the same title, published in the Spring 2005 issue of *Metalsmith*.

Dana Singer is the executive director of SNAG.

top to bottom
Logo of the The Center for Craft, Creativity & Design

Steve Midgett teaching mokume gane techniques at Georgian College, in Barrie, Ontario, 2004

Cynthia Eid's winning design for the SNAG Honorary Member Award

Cover of Spring 2005 *Metalsmith*

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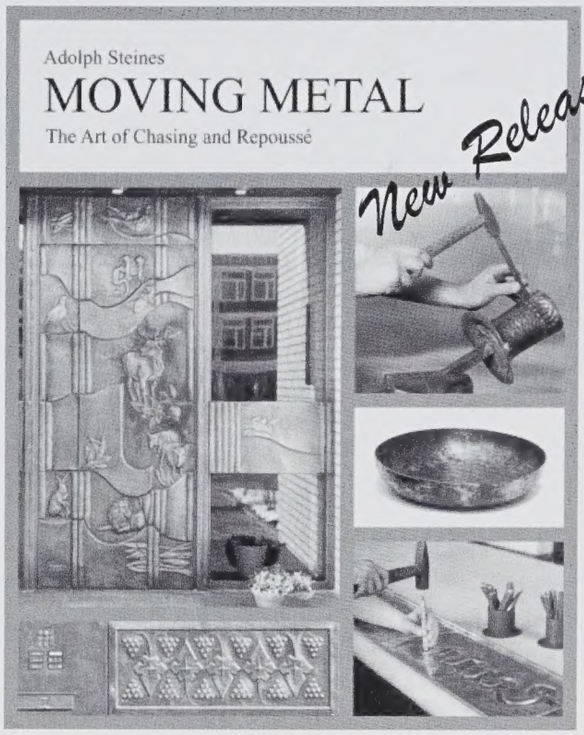

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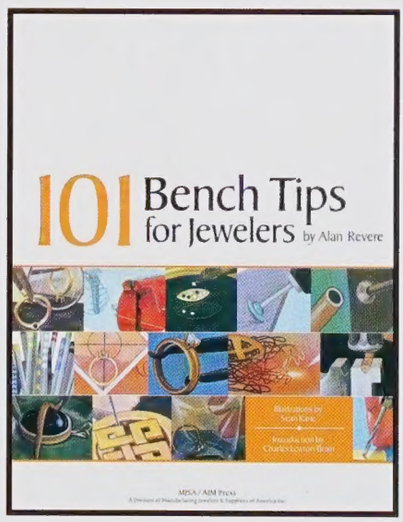
—From the Introduction by Charles Lewton-Brain



Alan Revere—acclaimed designer, author, and educator—now shares his most valuable bench tips and tricks in *101 Bench Tips for Jewelers*. Based on the monthly column in *AJM*, this book will help any jeweler speed production, improve quality, and raise profits at the bench. Filled with helpful, full-color illustrations, this publication offers tips for all aspects of bench work, from soldering to stone setting, piercing to final polish. *101 Bench Tips for Jewelers* is a resource you'll return to for many years to come.

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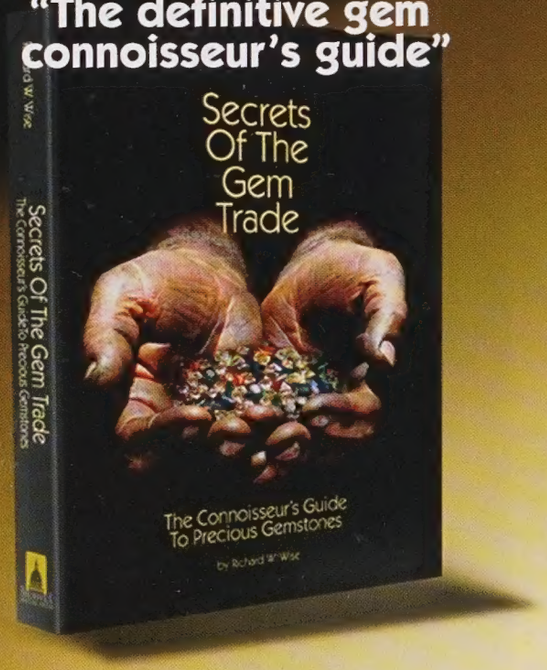

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Charles Lewton-Brain,
Orchid, 12/2003

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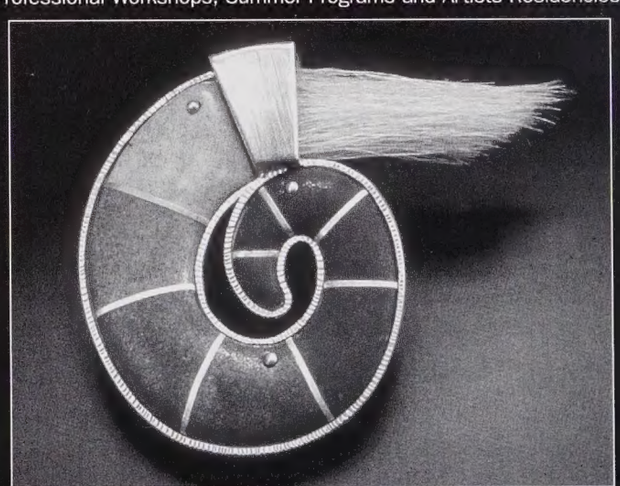

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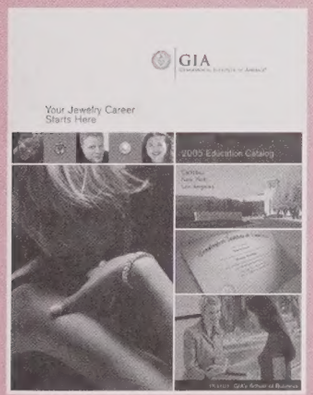

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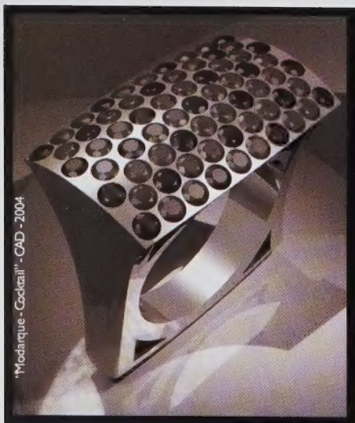
"Modarque - Cocktail" - CAD - 2004

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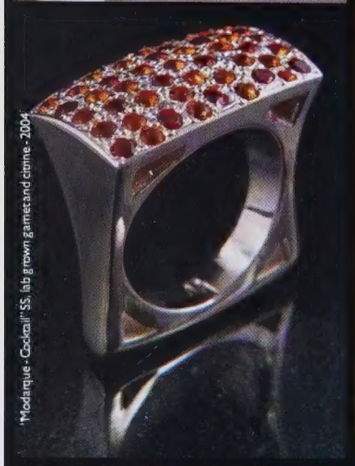
"Modarque - Cocktail" SS, lab grown garnet and citrine - 2004

"Damon Medallion Pendants" 18K fine silver - 2004

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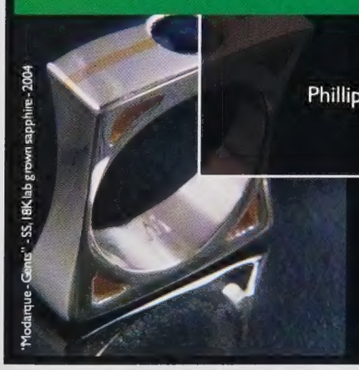
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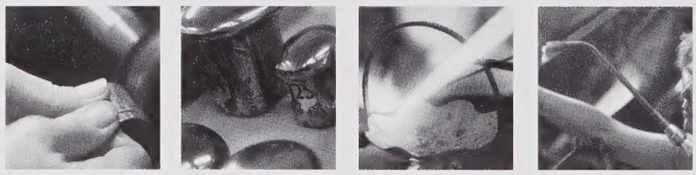

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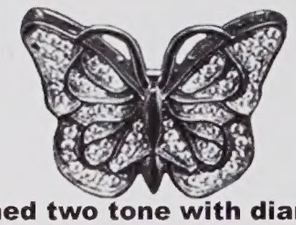
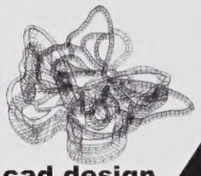


finished two tone with diamonds

2 piece model



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Our resident staff of around 12 includes practicing artists, designers, theorists and technical instructors. We run a long established program of visiting artists from other countries.

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The Department has a long established capacity for in-house manufacture via CNC, rapid prototyping and laser-based technologies. Recent UK government and Science Research Investment Fund awards have expanded our rapid prototyping and digital research resources: we have EnvisionTec® 'Perfactory®' and Solidscape® T66 Benchtop machines. The funding has also enabled the acquisition of a Datron® M9 high-speed micro CNC machining center and a Universal Laser System Inc® X-660 laser platform. For visualisation and product development the department has immersive VR technology and a Dell®-based renderfarm.

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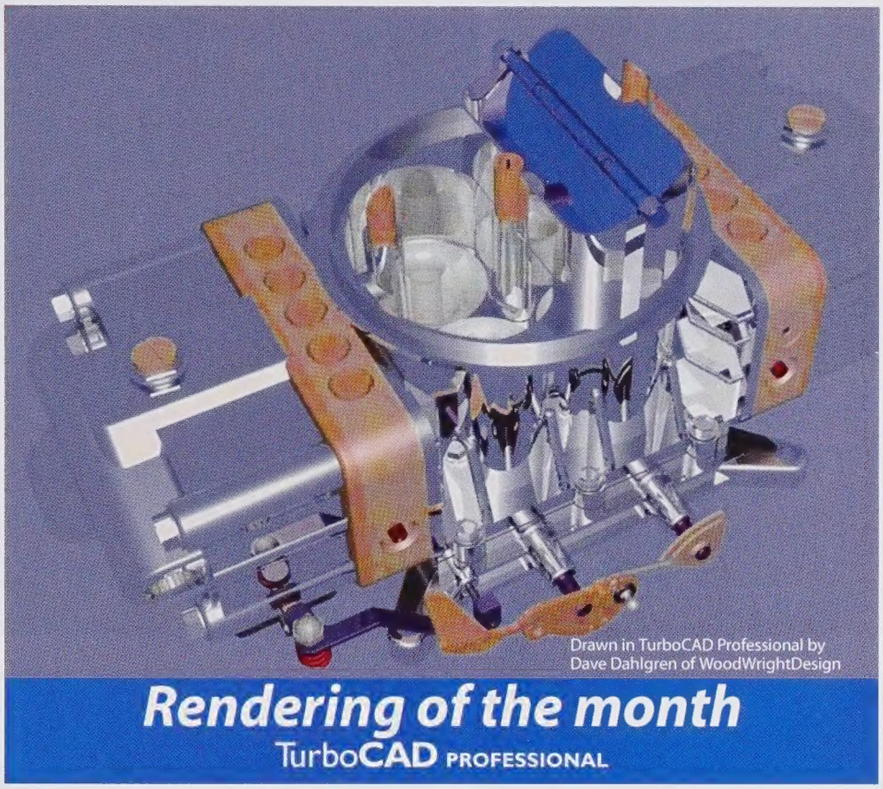

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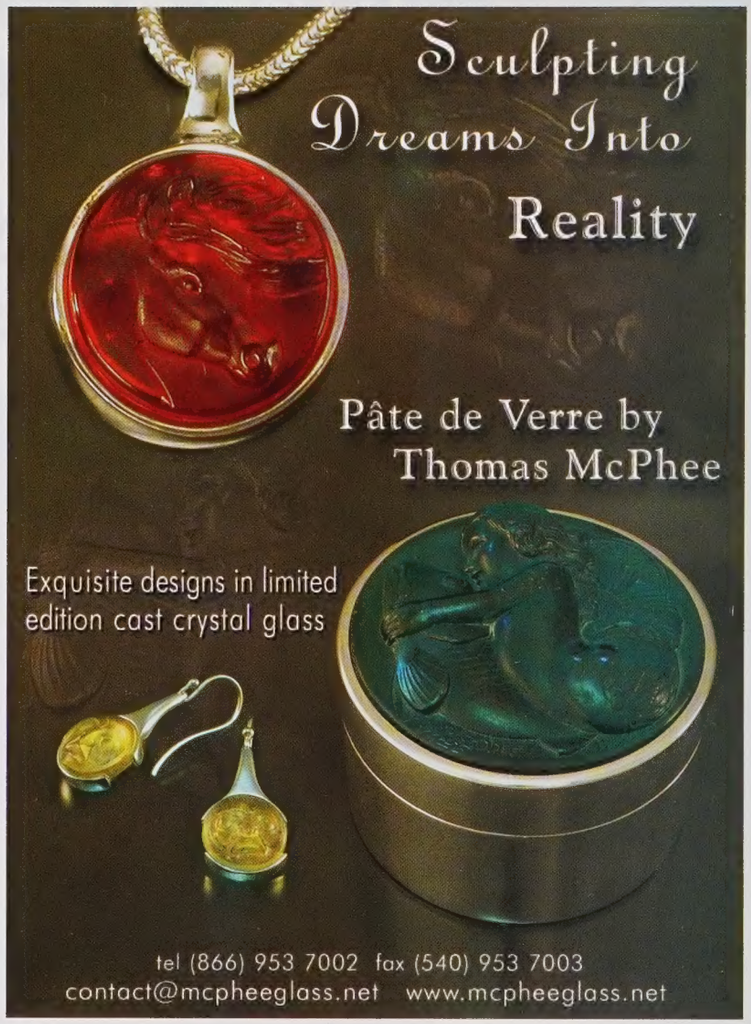
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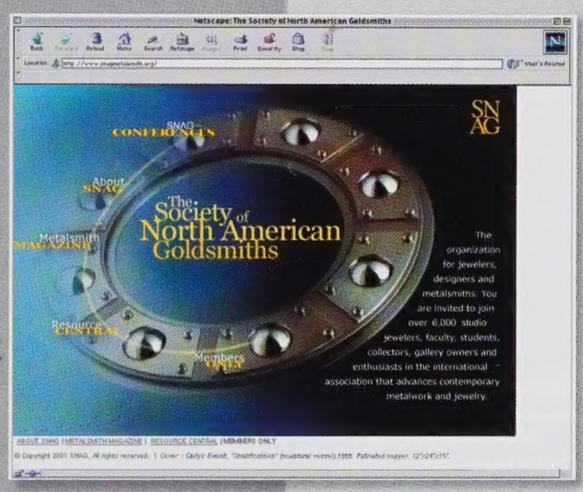
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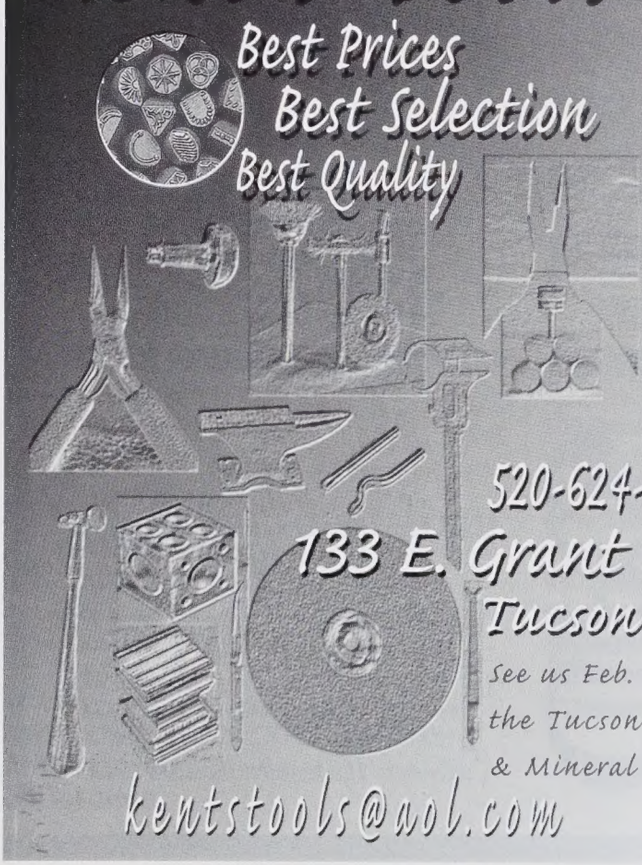

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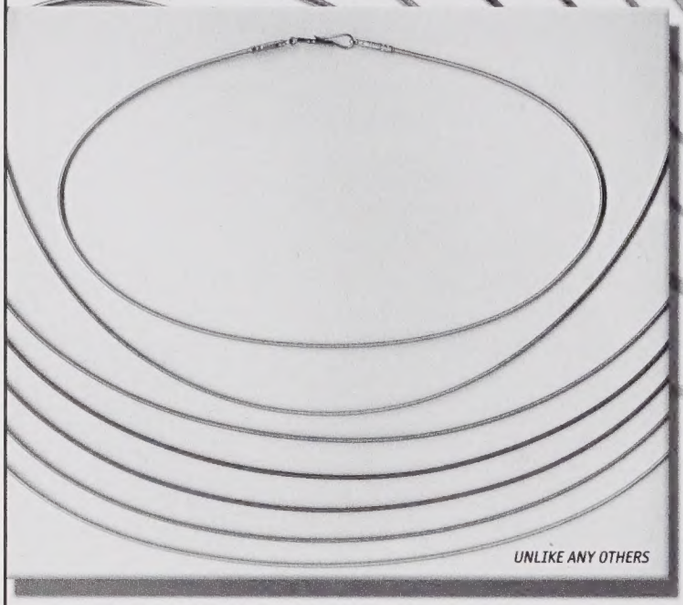

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Cup with Oval, 1998
sterling silver
5 x 4 x 3"
Photo: Robert Storm

Biba Schutz
Ceremonial Pendant, 1998
copper, sterling, fine silver
4 3/4 x 1 1/4 x 1 1/2"
Photo: Ron Boszko

(Summer 2003 *Metalsmith*)
cover: Manfred Bischoff
Brothers (brooch), 2001
Courtesy Joseph Kosuth and
Cornelia Lauf, Rome

Helen Shirk
Sustaining Sprit XXVII, 2000
copper, patina, colored pencils
6 x 23 x 23"

Whitney Boin
Post Engagement Ring, 1996
produced since 1988
platinum, 18k
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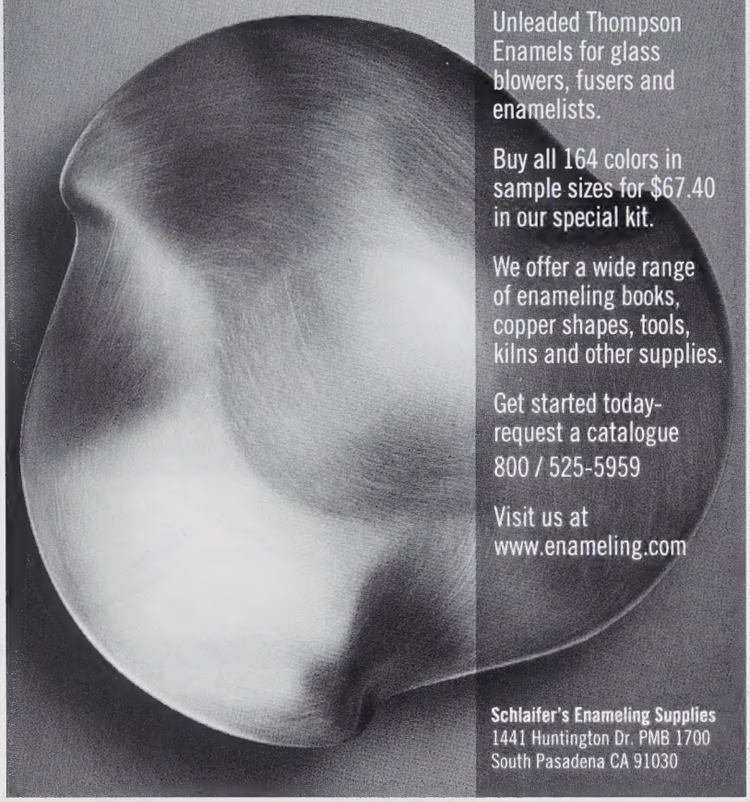

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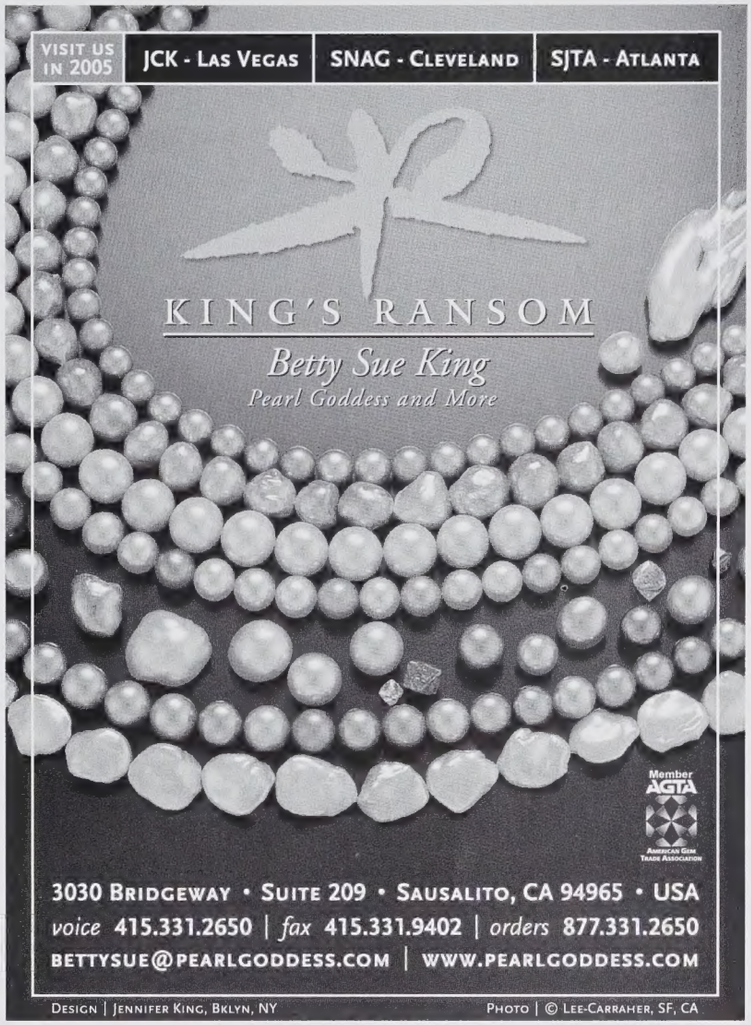

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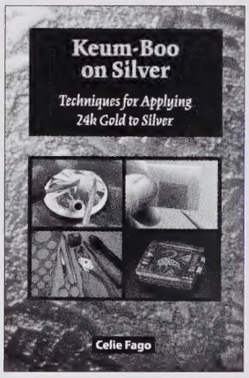

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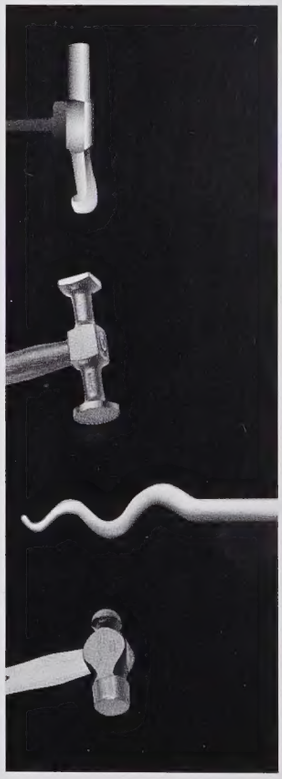

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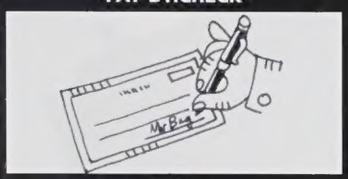

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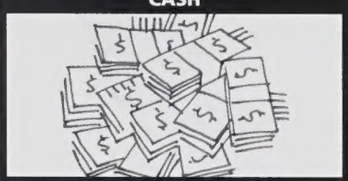

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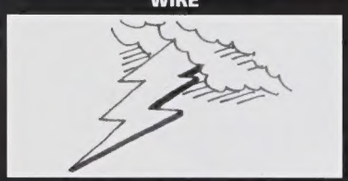

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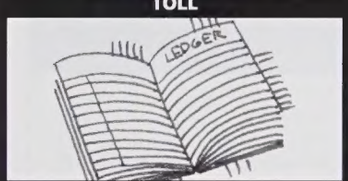

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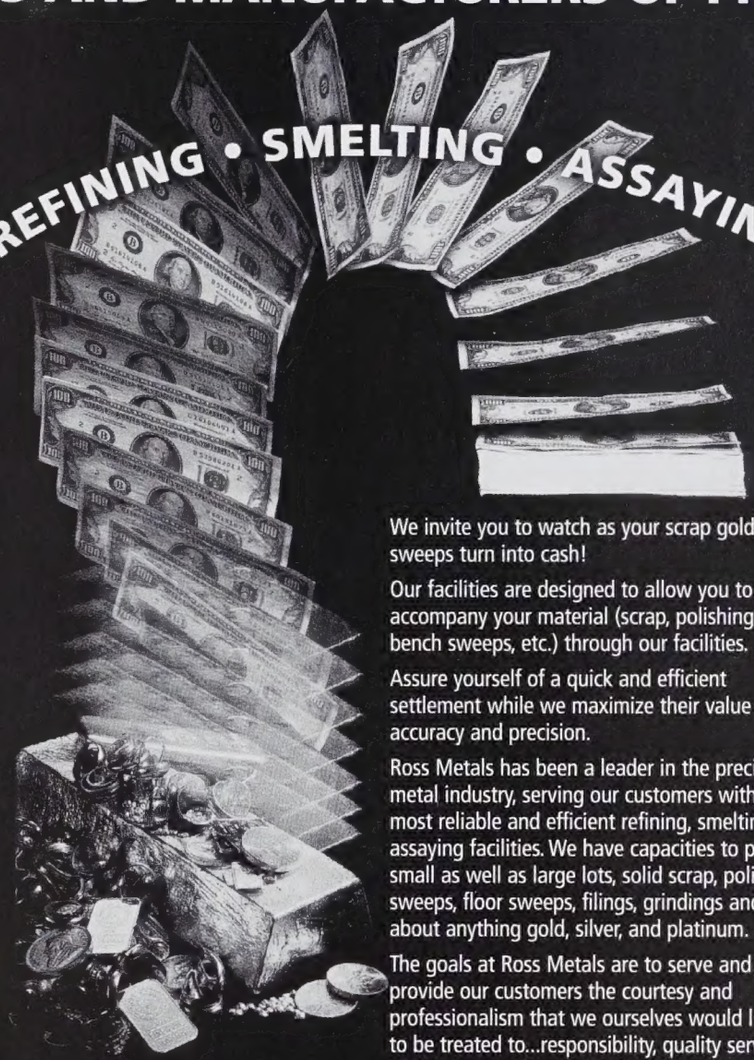

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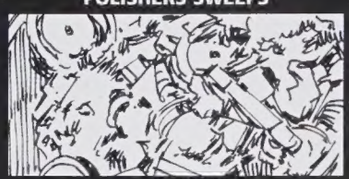

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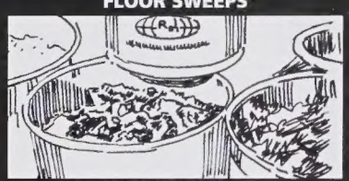

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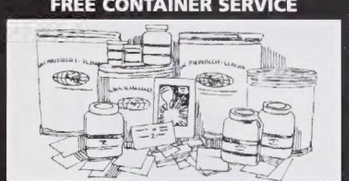

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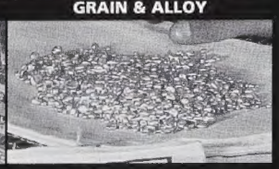

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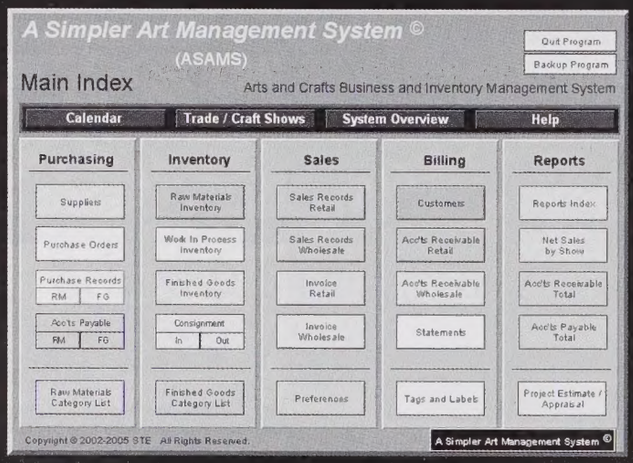

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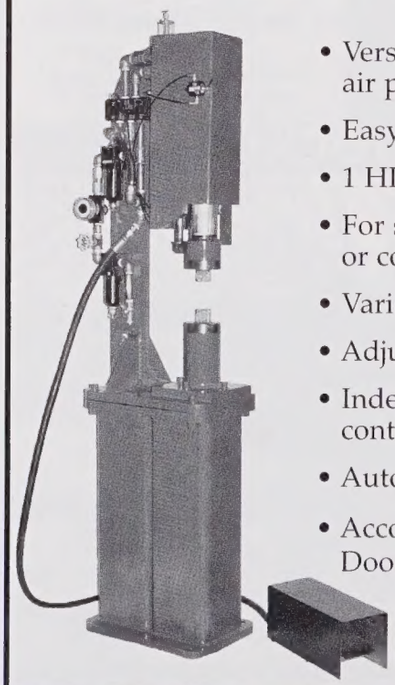

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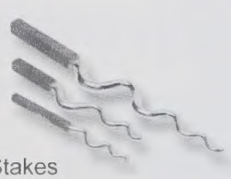

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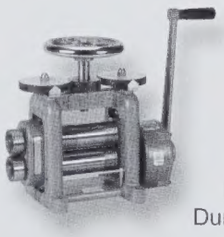

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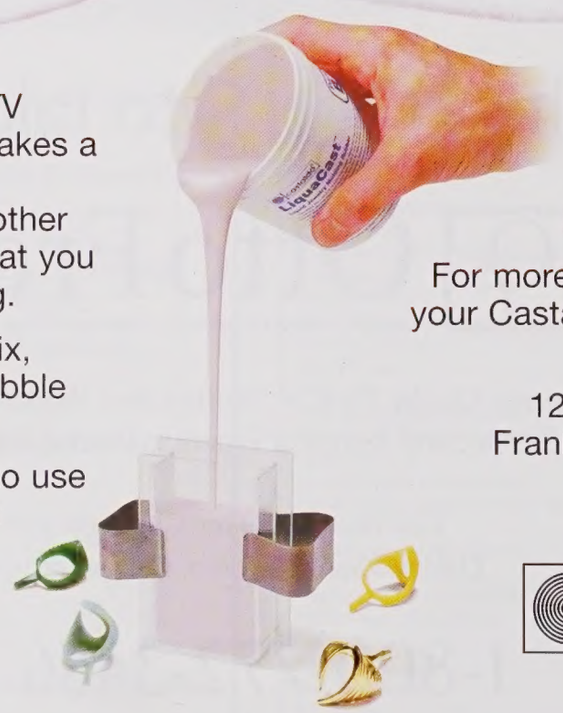

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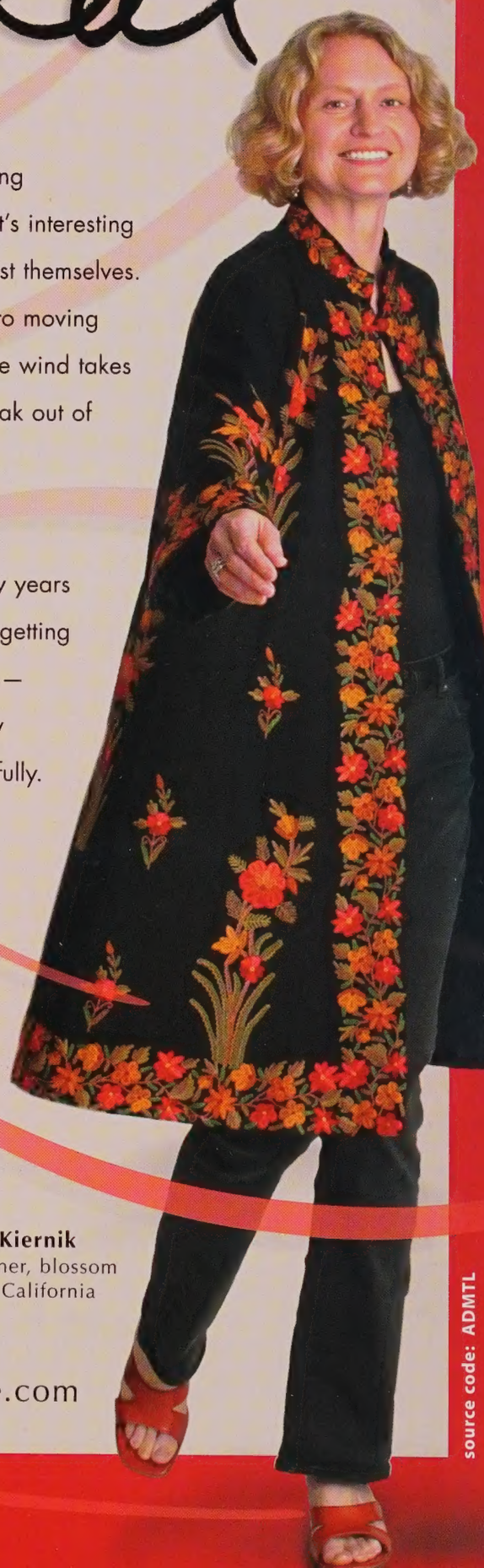

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